Enrollment Trends
at Virginia's Public
Colleges and Universities



State Council of Higher Education for Virginia

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EXECUTIVE SUMMARY

Since its inception in 1956, the State Council of Higher Education for Virginia (SCHEV) has examined enrollment trends at Virginia public institutions. This report takes an in-depth look at what has transpired on the Commonwealth's campuses over the last 20 years as compared with national trends. Such data analysis should prove useful in determining the impact of past policies, as well as highlighting areas for further discussion, examination, and planning. Therefore, this report is not intended to provide recommendations or solutions, but rather to make data available to assist policymakers in addressing the many important issues facing Virginia higher education.

The enrollment growth and make-up at Virginia's public institutions reflect many of the trends occurring at the national level. Statistics presented on page 6 highlight the comparisons. Both the nation and Virginia have experienced increased enrollment at all levels of public higher education. In addition, the demographic make-up of undergraduates at the national and state level has become less traditional in terms of ethnicity/race and gender and more traditional in terms of age of students and the proportion of students enrolled full-time.

Over the past 20 years, Virginia's public four-year institutions have steadily increased their enrollments. In 2006, the 15 institutions which comprise Virginia's four-year system accommodated 46,431 more students than they did in 1987. Detailed tables and charts depicting the numbers are provided on page 14. At the undergraduate level, growth has been steady for both in-state and out-of-state students. As a result, the proportion of in-state to out-of-state students in the public four-year system has remained relatively constant, shifting up 2% to 81% in-state (compared to 19% out-of-state). The graph on page 15 shows the steady growth and stable residency status of undergraduates at public four-year institutions.

This increased growth is echoed in nearly all regions of the Commonwealth. Demographic characteristics underlying undergraduate trends over the last 10 years show that enrollment at public four-year institutions increased from every Virginia geographic region except for the Eastern Shore. The table and chart on page 31 illustrate not only the percent growth over the past 10 years, but also the percentage of undergraduate students in the public four-year sector from each region. In 2006, 29% of the undergraduate students at four-year institutions came from Northern Virginia, while .3% of students came from the Eastern Shore. In part, these numbers mirror the population density of the region.

Another demographic characteristic of interest is the ethnicity/race of the students who comprise this enrollment growth. Since 1996, the proportion of minority students at public four-year institutions rose 1% to 27% of total undergraduate enrollment in 2006. As seen in the table on page 26, enrollment of Hispanic students has grown at the fastest rate and now comprises 4% of the total undergraduate population. In contrast, Black, non-Hispanic enrollment has grown at a modest rate of 9%. Though this group still constitutes the largest proportion of minority students, their population in relation to other minority groups has gone down slightly.

Another aspect of enrollment growth explored in this report is the transfer student population. The table on page 20 shows that while the overall number of transfer students at public four-year institutions has remained relatively constant since 1993, more students are transferring from the two-year system. The table on page 21 takes a closer look at the two-year transfer students. The majority of Virginia's two-year transfer students enter Virginia's public four-year institutions prior to completing

their associate's degree. However, in recent years there is a clear trend towards completing the associate's degree before transfer. Whether a result of state policies concerning guaranteed enrollment agreements or individual institutional articulation agreements, growing numbers of students are opting to complete their associate's degree prior to transfer.

As more students have entered Virginia's public four-year system, the institutions have done a notable job of accommodating the growth while maintaining or somewhat modifying their missions. Four institutions have absorbed the majority of in-state undergraduate growth: George Mason University, James Madison University, Old Dominion University, and Virginia Commonwealth University. (See the appendices for statistics on individual institutions.) While exhibiting little enrollment increase, Christopher Newport University has dramatically changed the character of its student body. The institution has moved away from a commuter, non-traditional student population to more of an on-campus, full-time, traditional population. Enrollment growth at Virginia's two Historically Black Colleges and Universities (HBCUs) is also worth noting. Over the last 20 years, Norfolk State University has seen declining enrollment while Virginia State University has seen a modest increase. As these two institutions continue to evolve and adapt to the changing landscape for HBCU institutions, their strategies could provide models for the nation.

Enrollment growth in the public four-year sector is mirrored in the public two-year sector. Over the last 20 years, Virginia's two-year sector, comprised of the 23 Virginia Community College System (VCCS) institutions and Richard Bland College, enrolled 34,291 more in-state students in Fall 2006 than in Fall 1987. As depicted in the chart on page 35, the proportion of in-state to out-of-state students in the two-year sector has remained constant at 95% in-state to 5% out-of-state. Minority enrollment in the Commonwealth's two-year institutions has also increased. The largest increases were among Hispanic and Black, non-Hispanic students. The table and chart on page 41 provide statistics on the overall rate of growth for each racial/ethnic group, as well as the proportion of total enrollment each ethnic group constitutes in the years 1996, 2001, and 2006. Over this same time period, the number of students from six of the seven Virginia regions grew by more than 10%. The sole exception was the Southwest regions which grew by 7%. The table and chart on page 45 display public two-year sector statistics for each region.

In addition to the standard fall headcount enrollment and demographic trends, this report examines two important areas of interest: high school dual enrollment and Science, Technology, Engineering, and Mathematics (STEM) enrollment. The table and chart presented on page 47 reveal that high school dual enrollment has increased sharply since 1992. The growth has occurred primarily in the VCCS system. The table on page 48 highlights the institutions which service the most high school dual-enrolled students and which institutions have experienced the largest rates of growth. Virginia enrollment in STEM programs has increased by 11% since 1995, but there are some noteworthy downward trends in specific areas, such as computer science and conservation and renewable sciences. These data are presented on pages 51 and 52. Virginia STEM completion statistics are highlighted on page 56.

KEY FINDINGS

PUBLIC FOUR-YEAR INSTITUTIONS

- Between 1987-88 and 2005-06, total undergraduate FTE increased by 25.1%. In-state undergraduate FTE grew by 28.2% whereas out-of-state undergraduate FTE grew by 14.6% during this time period.
- The systemwide increase in total undergraduate FTE can be largely attributed to the strong expansion of three institutions: James Madison University (59.2%), George Mason University (58.5%), and Virginia Commonwealth University (46.9%).
- Over the past 20 years, total undergraduate fall headcount enrollments have gone up by 32,419 students. By 2006, the public four-year institutions accommodated 27,931 more in-state students and 4,488 additional out-of-state students.
- The University of Virginia's College at Wise (81.0%), James Madison University (69.9%), George Mason University (44.9%) and Virginia Commonwealth University (43.6%) exhibited the largest percent increase in total undergraduate enrollments. The latter three institutions together enrolled an additional 18,695 undergraduates which represents 58% of the 32,419 student total.
- From 1992 to 2006, new freshmen fall headcount enrollment increased 36.2% for in-state students and 25.7% for out-of-state students.
- Four institutions accounted for the majority of in-state new freshman growth: Christopher Newport University (632 students), James Madison University (1,071 students), Virginia Commonwealth University (1,719 students), and Virginia Tech (764 students).
- In 2006, 9,769 students transferred into public 4-year institutions. Three institutions enrolled more than half of these transfer students: George Mason University (2,084 students), Virginia Commonwealth University (1,754 students), and Old Dominion University (1,691 students).
- Transfers with associate's degrees (baccalaureate credit) from Virginia public two-year institutions have grown 45.7% since 1993. The majority of this increase has occurred since 2002. Ten of the 15 public four-year institutions in Virginia report a gain in associate's degree transfers.
- In 2006, the total undergraduate minority population at Virginia's public four-year institutions was 26.5%. Excluding Virginia's two Historically Black Colleges and Universities (HBCU), three institutions have over one-third undergraduate minority populations: George Mason University (32.6%), Old Dominion University (31.8%), and Virginia Commonwealth University (33.5%).

- Between 1996 and 2006, the strongest minority growth occurred among Hispanic students (up 86.7%), followed by Asian/Pacific Islander (35.4%), Black, non-Hispanic (up 9.4%), and American Indian/Native American (up 2.2%).
- In 2006, 55% of the undergraduate students at Virginia public four-year institutions were women. Four institutions enroll less than 40% men: James Madison University (39.1% men), Longwood University (34.6% men), Norfolk State University (37.7% men), and University of Mary Washington (34.1% men).
- Undergraduate enrollment at public four-year institutions increased from every Virginia geographic region, except for the Eastern Shore. However, enrollment of students from the Eastern Shore increased by 28.6% at Virginia's public two-year institutions.

PUBLIC TWO-YEAR INSTITUTIONS

- Between 1987 and 2006, total enrollment at Virginia's public two-year institutions grew by 29.5% or 36,583 students.
- First-time freshmen headcount enrollment at public two-year institutions experienced a 95.4% increase from 1992 to 2006.
- Seven out of the 23 community colleges grew by more than 500 in-state new freshmen between 1992 and 2006: Central Virginia CC (501 students), Germanna CC (749 students), J. Sargeant Reynolds CC (657 students), John Tyler CC (648 students), Lord Fairfax CC (571 students), Northern Virginia CC (2,976 students), and Tidewater CC (2,745 students).
- The number of transfers to two-year Virginia institutions has declined by 4% since 1992.
- Total minority enrollment at Virginia's public two-year institutions rose by 19,139 students or 63.4%. The largest increase was among Hispanic students (up 105.1%), followed by Black, non-Hispanic (up 63.3%), American Indian/Native American (up 52.6%), and Asian/Pacific Islander (up 40.2%).
- In Fall 2006, women comprised 58.7% of the undergraduate population at Virginia public two-year institutions.
- Between 1996 and 2006, the number of students from six of the seven Virginia regions attending public two-year institutions grew more than 10%. The one exception was the Southwest region with a percent increase of 6.9%.

INTRODUCTION AND OVERVIEW

The State Council of Higher Education for Virginia (SCHEV) is the Commonwealth's higher education coordinating agency, and the agency's mission is to "promote the development of an educationally and economically sound, vigorous, progressive, and coordinated system of higher education in Virginia." SCHEV is required by the Code of Virginia (§ 23-9.6:1.4) to review and approve the enrollment projections of the public institutions each biennium prior to the "long" or even-year session of the General Assembly. SCHEV requires these enrollment projections to extend six years.

In 2005, Virginia's Governor and General Assembly approved the Higher Education Restructuring Act (§ 23-38.88). This Act sets forth 12 state goals for public higher education and requires each public institution to develop six-year academic, enrollment, and financial management plans. Under the Restructuring Act, public institutions are to address areas such as access, affordability, accountability, retention and progression, shortage areas, transfer, dual enrollment, research, increased participation with K-12 and the business community, and campus safety. SCHEV is charged with reviewing and certifying the institutions' progress toward addressing these goals.

Given SCHEV's responsibility to plan for Virginia's higher education system, it is important for the agency to take an in-depth look at areas of growth, need, or change in the enrollment patterns of the system. This report is not intended to provide recommendations or solutions, but rather to make data available to assist policymakers in addressing the many important issues facing Virginia higher education. To that end, this report provides a look at enrollment trends at both the systemwide and institutional level over the last 20 years.

Specifically, this report presents public four- and two-year sector aggregated enrollment data consisting of full-time-equivalent (FTE) enrollments by level and by residency from 1987-88 to 2005-06, fall headcount enrollment by level and by residency from 1987 to 2006, new freshmen and new undergraduate transfer enrollment by residency from 1992 to 2006. Additionally, the report provides snapshots of undergraduate student demographic data for three years - 1996, 2001, and 2006 by ethnicity/race, gender, age distribution, student load, students living on/off campus, and geographic region. This report also includes a special section of trends in two focus areas: high school dual enrollment and Science, Technology, Engineering, and Mathematics (STEM) enrollments. It should be noted that new student enrollment and undergraduate student demographic data only goes back to 1992, the year the Council began collecting student-specific data. The report's appendices include the same enrollment data for each public four-year institution, the Virginia Community College System, and Richard Bland College.

NATIONAL ENROLLMENT TRENDS

Postsecondary education participation has been on the rise nationally. According to the National Center of Education Statistics' *Digest of Educational Statistics 2005*, total enrollment at public four-year institutions increased 1.3 million between the years 1987 and 2004, an increase of 24%. During this same time period, Virginia's total headcount enrollment at public four-year institutions grew at a slightly stronger rate of 26% (38,968 students). Public two-year institutions also exhibited strong gains nationally, growing 1.7 million (37%) from 1987 to 2004. However, Virginia's public two-year undergraduate enrollment did not experience the same growth rate, expanding only 24% or 29,739 students during this same time period.

Nationally, total undergraduate enrollment at public four-year institutions grew by 1 million students or 24% between 1987 and 2004.³ Virginia's public four-year institutions expanded at a similar rate, growing by 23% or 25,854 students in the same time period.

Between 1987 and 2004, graduate enrollment at public institutions grew by 26% nationally. The percent increase for female graduate students was much higher than for male graduate students, 37% and 13% respectively. Graduate enrollment at Virginia public institutions grew by 39% during these same years. As with the national trends, Virginia experienced differences in the rate of growth by gender in graduate student enrollment. Between the years 1992 and 2004, female graduate enrollment increased 26% while male graduate enrollment increased 10%.

Nationally, first-professional enrollment at public institutions grew by 23% from 1987 to 2004. This growth in enrollment is comprised primarily of women. Female first-professional enrollment at public universities rose by 70% while male first-professional enrollment fell 5% during this time period. During this same time frame, enrollment at the five Virginia institutions which offer first professional programs grew by 14%. From 1992 to 2004, women enrolled in Virginia first-professional programs at a faster rate than did men, 35% to 4% respectively.

The following table displays national and Virginia enrollment growth by level at public four- and two-year sector between 1987 and 2004.

Enrollment Growth by Public Four- and Two-Year Sector between 1987 and 2004					
	Natio	onal	Vir	ginia	
	Public	Public	Public	Public	
	Four-Year	Four-Year Two-Year		Two-Year	
Total Enrollment	24%	37%	26%	24%	
Undergraduate Enrollment	24%	N/A	23%	N/A	
Graduate Enrollment	26%	N/A	39%	N/A	
First Professional Enrollment	23%	N/A	14%	N/A	

Table 1: Enrollment Growth by Public Four- and Two-Year Sector between 1987 and 2004

Between 1992 and 2004, enrollment of first-time freshmen at public four-year universities increased by 33% nationally.⁶ In Virginia, first-time freshmen enrollment at public four-year institutions grew by 29% during the same time period. National first-time freshmen growth at public two-year institutions was nearly flat, increase only 2% from 1992 to 2004.⁷ Public two-year first-time freshmen growth in Virginia was substantially stronger, increasing 50% during the years 1992 to 2004.

There are significant gender differences in the undergraduate growth rate at public four-year institutions as well. Nationally between 1990 and 2004, male enrollment at public four-year institutions grew 9%, while female enrollment grew by 20%. Virginia also exhibited differences in gender undergraduate public four-year enrollment, though not as pronounced as the national figures. From

1992 to 2004, male undergraduate enrollment at public four-year institutions in Virginia grew by 12%, while female enrollment expanded by 18%. At public two-year institutions, gender differences were not as pronounced as those at public four-year universities nationally. At the national level, male enrollment at public two-year institutions grew by 21%, while female enrollment expanded by 28% between 1990 and 2004. Following the national two-year institution trends, Virginia public two-year colleges also exhibited different growth rates among men and women. From 1992 to 2004, male enrollment at Virginia's public two-year colleges grew by 10% while female enrollment expanded by 18%.

Total minority enrollment at public four-year institutions nation-wide rose 73% from 1990 to 2004. This figure includes not only undergraduate enrollment, but also graduate and first-professional students. Among the ethnic groups, Hispanic students showed the largest increase, rising 112% during that time period, followed by Asian/Pacific Islander (79%), American Indian/Native American (76%), and Black, non-Hispanic (50%). White, non-Hispanic enrollment at public four-year institutions rose by only 1% during these years. Total growth in ethnic group enrollment at Virginia public four-year institutions mirrors the national numbers. Total minority (undergraduate, graduate and first professional) enrollment increased by 32% between 1992 and 2004. Hispanic enrollment had the largest increase at 113%, followed by Asian/Pacific Islander at 61%, American Indian/Native American at 31%, and Black, non-Hispanic at 14%.

Nationally, students enrolling full-time at public two-year institutions have outpaced those enrolling part-time, rising 41% and 16% respectively between 1990 and 2004. During this same time period, minority enrollment at public two-year institutions has gone up dramatically, increasing 95%. Increases varied among the ethnic groups, with Hispanic students experiencing the largest increase at 125%, followed by Asian/Pacific Islander (99%), Black, non-Hispanic (73%), and American Indian (48%). White, non-Hispanic enrollment rose only 3% during these years. In Virginia from 1992 to 2004, students enrolled full-time at public two-year institutions grew by 31%, while students enrolled part-time grew by 8%. During these same years, minority enrollment at Virginia two-year institutions expanded by 66%. American Indian/Native American growth in Virginia was much larger than at the national level, increasing by 155%. Hispanic growth was also notable increasing 134%, followed by Black, non-Hispanic at 61% and Asian/Pacific Islander at 44%.

VIRGINIA ENROLLMENT TRENDS

TOTAL PUBLIC FOUR-YEAR SUMMARY

Annualized Full-Time Equivalent (FTE) Enrollment

Total Annualized FTE Enrollment:

From 1987-88 to 2005-06, the total FTE enrollment at Virginia public four-year institutions has grown by 38,848 FTE students, or 28.8%. In-state total FTE enrollment grew at a greater rate than did out-of-state total FTE, 30.8% and 22.9% respectively. As a result, the proportion of in-state to out-of-state total FTE enrollment shifted over the last 19 years by 1% to 76.5% in-state total FTE and 23.5% out-of-state total FTE.

Seventy-nine percent of the total FTE enrollment at public four-year institutions is from undergraduate FTE, 18% is from graduate FTE, and 3% is from first-professional FTE enrollment.

The table and chart below display the total FTE enrollment at Virginia public four-year institutions from 1987-88 to 2005-06.

Annı	Total Annualized FTE Enrollment						
Year	In- State	Out-of- State	Total				
1987-88	101,590	33,202	134,792				
1988-89	104,990	34,008	138,998				
1989-90	108,563	33,884	142,447				
1990-91	110,255	34,104	144,359				
1991-92	112,324	33,837	146,161				
1992-93	113,459	32,310	145,769				
1993-94	112,375	32,515	144,890				
1994-95	112,606	31,923	144,529				
1995-96	112,146	32,608	144,754				
1996-97	114,347	33,764	148,111				
1997-98	116,759	34,567	151,326				
1998-99	118,592	34,831	153,423				
1999-00	118,393	35,225	153,618				
2000-01	117,490	36,765	154,255				
2001-02	120,531	37,726	158,257				
2002-03	124,248	38,778	163,026				
2003-04	126,821	39,778	166,599				
2004-05	129,272	39,975	169,247				
2005-06	132,850	40,790	173,640				
% Change from 1987-88	30.8%	22.9%	28.8%				
% Change Accounted for by the Last 5 Years	39.4%	40.4%	39.6%				

Public Four-Year Institutions Total Annualized FTE Enrollment From 1987-88 to 2005-06

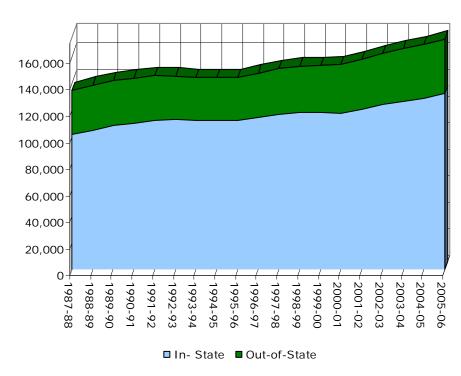


Figure 1 : Public Four-Year Total FTE Enrollment from 1987-88 to 2005-06

Table 2: Public Four-Year Total FTE Enrollment from 1987-88 to 2005-06

Undergraduate Annualized FTE Enrollment:

Over the last 19 years, the total undergraduate FTE enrollment at public four-year institutions increased 27,627 FTE. This represents a 25.1% increase. The percent change for in-state FTE doubled that of out-of-state FTE, at 28.2% and 14.6% respectively. During the same time period, the proportion of total undergraduate in-state FTE rose 2% to 79.5%, while out-of-state undergraduate FTE declined to 20.5%.

Except for Virginia Military Institute (-2.9%) and Norfolk State University (-32.5%), all of the Commonwealth's public four-year institutions experienced positive total FTE growth over the 19-year period. However, the systemwide increase in total undergraduate FTE can be largely attributed to the strong expansion of three institutions: James Madison University (59.2%), George Mason University (58.5%), and Virginia Commonwealth University (46.9%). These three institutions account for 63% of the total undergraduate FTE increase. Several campuses experienced a shift in their in-state to out-of-state undergraduate FTE ratios. The largest downward shift in proportion of in-state undergraduate FTE occurred at the University of Mary Washington (down 10% to 72.3% in-state FTE), and James Madison University (down 6% to 69.8% in-state FTE). In contrast, five institutions saw larger increases in the proportion of in-state students: Old Dominion University (up 9% to 89.6% in-state FTE), Virginia State University (up 9% to 66.8% in-state FTE), Norfolk State University (up 7% to 74.9% in-state FTE), Christopher Newport University (up 6% to 97.1% in-state FTE), and University of Virginia (up 6% to 67.5% in-state FTE).

The table and chart below illustrate the total undergraduate FTE enrollment at Virginia public four-year institutions from 1987-88 to 2005-06.

Undergraduate Annualized FTE Enrollment					
Year	In- State	Out-of- State	Total	ent % In- State	% Out-of- State
1987-88	85,303		109,864	77.6%	22.4%
1988-89	88,103	25,130	113,233	77.8%	22.2%
1989-90	90,210	25,204	115,414	78.2%	21.8%
1990-91	91,363		116,325	78.5%	
1991-92	92,499	24,605	117,104	79.0%	21.0%
1992-93	92,336	23,363	115,699	79.8%	20.2%
1993-94	91,013	23,158	114,171	79.7%	20.3%
1994-95	90,475	22,680	113,154	80.0%	20.0%
1995-96	89,920	23,070	112,990	79.6%	20.4%
1996-97	91,637	24,239	115,876	79.1%	20.9%
1997-98	93,624	24,938	118,562	79.0%	21.0%
1998-99	95,593	25,396	120,989	79.0%	21.0%
1999-00	96,363	25,495	121,858	79.1%	20.9%
2000-01	96,050	26,252	122,302	78.5%	21.5%
2001-02	99,011	26,734	125,745	78.7%	21.3%
2002-03	101,805	27,365	129,171	78.8%	21.2%
2003-04	103,506	27,674	131,180	78.9%	21.1%
2004-05	105,964	27,584	133,549	79.3%	20.7%
2005-06	109,348	28,143	137,491	79.5%	
% Change from 1987-88	28.2%	14.6%	25.1%		
% Change Accounted for by the Last	10.004	00.004	10.504		
5 Years	43.0%	39.3%	42.5%	2005.00	

Table 3: Public Four-Year Undergraduate FTE Enrollment from 1987-88 to 2005-06

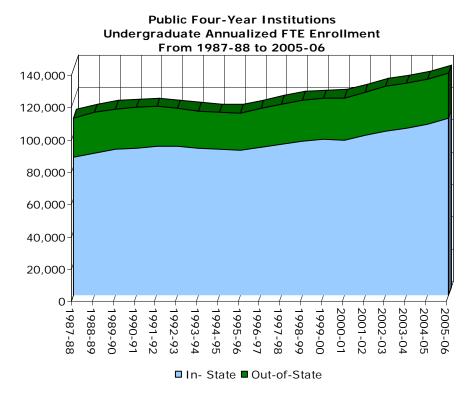


Figure 2: Public Four-Year Undergraduate FTE Enrollment from 1987-88 to 2005-06

Graduate Annualized FTE Enrollment:

Total graduate FTE enrollments at Virginia public four-year institutions rose by 10,348 FTE or 49.8%. Both in-state and out-of-state FTE enrollments saw larger increases, 52.6% and 44.9% respectively. The proportion of in-state to out-of-state FTE enrollments remained relatively unchanged with only a 1% rise in the proportion of in-state graduate FTE enrollment going to 65.2% in-state and 34.8% out-of-state in the 2005-06 academic year.

The University of Mary Washington and Christopher Newport University experienced the largest percent increase in graduate FTE enrollment (926.4% and 770.5% respectively). However, Christopher Newport University did not begin offering graduate programs until 1991 and the University of Mary Washington added programs in the 2000-01 academic year resulting in large increases. In terms of total graduate FTE enrollment, both institutions remain among the smaller ones in the system. Of the larger institutions in the Virginia public higher education system, George Mason University exhibited the largest rise of 158.8% in the 19-year period.

The majority of public four-year institutions had larger percent increases in graduate FTE enrollments for out-of-state than for in-state. Several institution saw bigger shifts in their proportion of in-state to out-of-state graduate FTE enrollments: Norfolk State University (down 13% to 77.7% in-state), James Madison University (down 11% to 76.2% in-state), College of William and Mary (down 9% to 55.7% in-state), Virginia State University (down 7% to 84.8% in-state), and George Mason University (down 6% to 73.6% in-state).

The table and chart below display the graduate annualized FTE enrollment trends from 1987-88 to 2005-06.

Graduate Annualized FTE Enrollment						
Year	In- State	Out- of- State	Total			
1987-88	13,306	7,467	20,773			
1988-89	14,007	7,664	21,671			
1989-90	15,433	7,478	22,911			
1990-91	15,882	7,947	23,829			
1991-92	16,779	8,107	24,886			
1992-93	17,905	7,958	25,863			
1993-94	18,197	8,307	26,504			
1994-95	18,978	8,124	27,102			
1995-96	19,065	8,298	27,363			
1996-97	19,288	8,359	27,647			
1997-98	19,639	8,463	28,102			
1998-99	19,483	8,253	27,736			
1999-00	18,561	8,446	27,007			
2000-01	18,108	9,167	27,276			
2001-02	18,206	9,562	27,769			
2002-03	19,140	9,879	29,019			
2003-04	20,056	10,476	30,533			
2004-05	20,135	10,624	30,759			
2005-06	20,303	10,818	31,121			
% Change from 1987- 88	52.6%	44.9%	49.8%			
% Change Accounted for by the Last 5 Years	30.0%	37.5%	32.4%			

Public Four-Year Institutions Graduate Annualized FTE Enrollment From 1987-88 to 2005-06

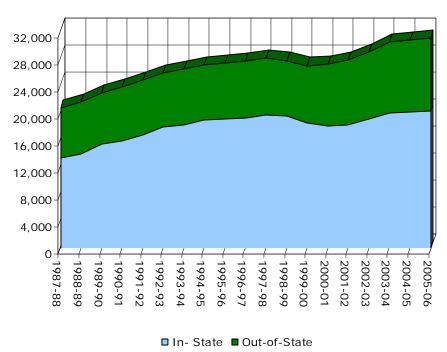


Figure 3: Public Four-Year Graduate FTE Enrollment from 1987-88 to 2005-06

Table 4: Public Four-Year Graduate FTE Enrollment from 1987-88 to

First Professional Annualized FTE Enrollment:

Total first-professional FTE enrollment at Virginia public four-year institutions grew by 874 FTE or 21.0% over the past 19 years. Out-of-state FTE enrollment grew at a larger rate than did in-state first-professional FTE enrollments, 54.2% to 7.8% respectively. Overall, the proportion of in-state to out-of-state FTE enrollment decreased 8% to 63.6% in-state for academic year 2005-06. institutions — College of William and Mary, George Mason University, University of Virginia, Virginia Commonwealth University, and Virginia Tech — offer first-professional education. Of these five, only Virginia Tech had a larger percent increase for in-state than out-of-state FTE first-professional. As a result, Virginia Tech's proportion of in-state to out-of-state FTE rose 27% to 89% in-state.

The table and chart below highlight the first professional annualized FTE enrollment data over the past 19 years.

First Professional Annualized FTE Enrollment					
Year	In- State	Out- of- State	Total		
1987-88	2,969	1,186	4,155		
1988-89	2,890	1,204	4,094		
1989-90	2,906	1,216	4,122		
1990-91	3,020	1,185	4,205		
1991-92	3,056	1,115	4,171		
1992-93	3,218	989	4,207		
1993-94	3,165	1,050	4,215		
1994-95	3,153	1,119	4,272		
1995-96	3,161	1,240	4,401		
1996-97	3,422	1,166	4,588		
1997-98	3,496	1,165	4,662		
1998-99	3,515	1,182	4,698		
1999-00	3,469	1,285	4,753		
2000-01	3,332	1,345	4,677		
2001-02	3,313	1,430	4,744		
2002-03	3,303	1,534	4,837		
2003-04	3,258	1,628	4,886		
2004-05	3,173	1,767	4,940		
2005-06	3,200	1,829	5,029		
% Change from 1987-88	7.8%	54.2%	21.0%		
% Change Accounted for by the Last 5 Years	-49.3%	62.0%	32.6%		

Table 5: Public Four-Year First-Professional FTE Enrollment from 1987-88 to 2005-06

Public Four-Year Institutions First Professional Annualized FTE Enrollment From 1987-88 to 2005-06

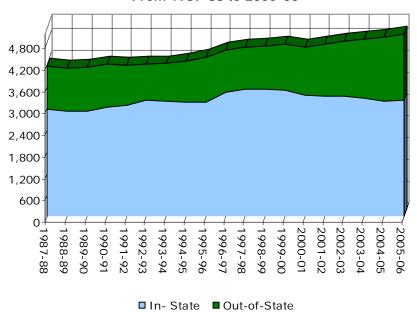


Figure 4: Public Four-Year First-Professional FTE Enrollment from 1987-88 to 2005-06

Fall Headcount Enrollment

Total Fall Headcount Enrollment:

From 1987 to 2006, the total fall headcount enrollments at Virginia's public four-year institutions grew by 46,431 students, or 30.8%. The system is now serving 36,737 more in-state students than it did in 1987. The rate of change for both in-state and out-of-state was fairly steady at 31.3% and 29.1% respectively. There was no change in the proportion of in-state to out-of-state students, remaining at 78.2% in-state and 21.8% out-of-state.

The total headcount population is comprised of 75% undergraduate students, 23% graduate students, and 2% first-professional students. The table and chart below depict the total fall enrollment numbers over the last 20 years.

Total Fall Headcount Enrollment						
Year	In- State	Out-of- State	Total			
1987	117,508	33,348	150,856			
1988	119,789	33,887	153,676			
1989	123,456	34,346	157,802			
1990	125,614	34,303	159,917			
1991	128,896	33,924	162,820			
1992	130,926	32,492	163,418			
1993	130,218	32,349	162,567			
1994	130,389	32,043	162,432			
1995	131,753	33,029	164,782			
1996	132,917	34,586	167,503			
1997	135,964	35,091	171,055			
1998	137,210	35,707	172,917			
1999	138,909	36,366	175,275			
2000	137,904	37,838	175,742			
2001	141,102	39,692	180,794			
2002	145,257	40,724	185,981			
2003	147,574	40,992	188,566			
2004	148,913	40,911	189,824			
2005	152,460	41,948	194,408			
2006	154,245	43,042	197,287			
% Change from 1987	31.3%	29.1%	30.8%			
% Change Accounted for by the Last 5	24.50	22.00	24.424			
Years Table 6: Public Four	24.5% -Year Total Fall	23.9% Headcount Enrollm	24.4% ent from 1987 to 2006			

Public Four-Year Institutions Total Fall Headcount Enrollment From 1987 to 2006

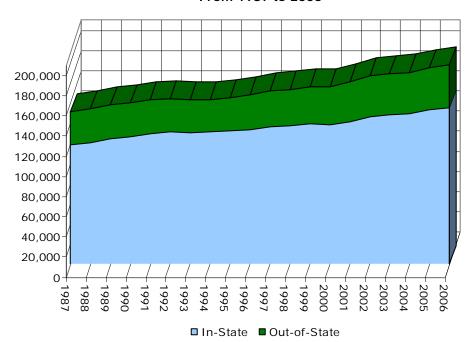


Figure 5: Public Four-Year Total Fall Headcount Enrollment from 1987 to 2006

Undergraduate Fall Headcount Enrollment:

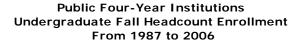
The total undergraduate fall headcount enrollments have gone up 28.3% since 1987. The public four-year system is now serving an additional 32,419 students. In-state growth has been stronger than out-of-state growth at 30.7% and 18.8% respectively. By 2006, the system was accommodating 27,931

more in-state undergraduate students than it did in 1987. The proportion of in-state to out-of-state students has remained relatively constant, shifting 2% in favor of in-state students to 80.7% in-state and 19.3% out-of-state.

Norfolk State University is the only public four-year institution which saw an overall decline in enrollments, down 23.3% in the 20-year period. The decline was sharper for out-of-state students (down 43.6%) than for in-state students (down 14.5%). The institutions which saw the largest percent increase in total undergraduate student enrollments were: University of Virginia at Wise (81.0%), James Madison University (69.9%), George Mason University (44.9%), and Virginia Commonwealth University (43.6%). In terms of student numbers, the latter three institutions together enrolled an additional 18,695 students, which represents 58% of the total increase of 32,419 students. Three fouryear institutions had a large increase in out-of-state enrollments: James Madison University (111.1%), University of Mary Washington (88.6%), and Virginia Commonwealth University (82.5%). As a result, these institutions, along with Virginia Tech, saw a shift in their proportion of in-state to out-of state students. The largest shift was at the University of Mary Washington (down 8% to 75.4% in-state) followed by James Madison University (down 6% to 70.4% in-state), Virginia Commonwealth University (down 2% to 91.0% in-state), and Virginia Tech (down 2% to 73.5% in-state). Several institutions experienced a proportional shift in the other direction. The largest shift occurred at Norfolk State University (up 9% to 78.8% in-state), Old Dominion University (up 9% to 90.3% in-state), Virginia State University (up 9% to 65.9% in-state), and Christopher Newport University (up 6% to 96.5% in-state).

In Fall 2006, the public four-year undergraduate fall headcount in-state to out-of-state ratio was 80.7% in-state to 19.3% out-of-state. Eight of the 15 public four-year institutions fell below that public mean: College of William and Mary (66.5% in-state), James Madison University (70.4% in-state), Norfolk State University (78.8% in-state), University of Mary Washington (75.4% in-state), University of Virginia (66.8% in-state), Virginia Military Institute (55.2% in-state), Virginia State University (65.9% in-state), and Virginia Tech (73.5% in-state).

The chart and table below highlight the undergraduate fall headcount changes over the past 20 years.



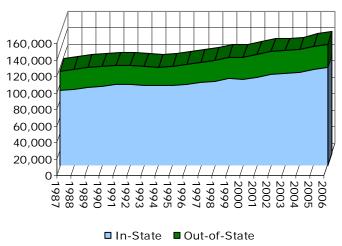


Figure 6: Public Four-Year Undergraduate Fall Headcount Enrollment from 1987 to 2006

	Undergraduate Fall Headcount Enrollment						
Year	In- State	Out-of- State	Total	% In- State	% Out-of- State		
1987	90,835	23,856	114,691	79.2%	20.8%		
1988	92,837	24,365	117,202	79.2%	20.8%		
1989	94,993	24,539	119,532	79.5%	20.5%		
1990	96,238	24,239	120,477	79.9%	20.1%		
1991	98,217	24,078	122,295	80.3%	19.7%		
1992	98,909	23,044	121,953	81.1%	18.9%		
1993	97,879	22,600	120,479	81.2%	18.8%		
1994	97,324	22,185	119,509	81.4%	18.6%		
1995	97,818	22,703	120,521	81.2%	18.8%		
1996	98,905	24,074	122,979	80.4%	19.6%		
1997	100,931	24,510	125,441	80.5%	19.5%		
1998	102,609	25,131	127,740	80.3%	19.7%		
1999	105,613	25,692	131,305	80.4%	19.6%		
2000	105,286	26,519	131,805	79.9%	20.1%		
2001	107,731	27,426	135,157	79.7%	20.3%		
2002	110,693	27,791	138,484	79.9%	20.1%		
2003	111,714	27,694	139,408	80.1%	19.9%		
2004	113,120	27,425	140,545	80.5%	19.5%		
2005	116,873	27,897	144,770	80.7%	19.3%		
2006	118,766	28,344	147,110	80.7%	19.3%		
% Change from 1987	30.7%	18.8%	28.3%				
% Change Accounted for by the Last 5 Years	28.9%	12.3%	26.6%				

Table 7: Public Four-Year Undergraduate Fall Headcount Enrollment from 1987 to 2006

New Freshmen Fall Headcount Enrollment:

Enrollment trends for this section only go back 15 years to 1992 when SCHEV began collecting student unit record data needed to analyze demographic characteristics of first-time freshmen.

In Fall 2006, new freshmen constituted 20% of undergraduates at the four-year public institutions. From 1992 to 2006, new freshmen fall headcount enrollment increased by 33.6% or 7,255 students. In-state new freshmen enrollment grew at a faster rate than did out-of-state new freshmen enrollment. Specifically, in-state first-time freshmen enrollment increased by 5,871 students or 36.2%, while out-of-state first-time freshmen enrollment grew by 1,384 students or 25.7%. Nine out of 15 public four-year institutions saw a greater percent increase in out-of-state new freshmen enrollment than in-state new freshmen enrollment between 1992 and 2006. However, a few institutions have small enrollment numbers that account for large out-of-state percent increases. The following institutions had the largest percent increases in out-of-state new freshmen enrollment over the last 15 years: Virginia Commonwealth University (268.8%), University of Virginia College at Wise (157.1%), George Mason University (116.7%), James Madison University (103.6%), and Longwood University (92.6%). In contrast, out-of-state new freshmen enrollment declined at Norfolk State University (56.9%), Radford University (53.7%), and Virginia State University (20.7%).

The table and chart below display the total new freshmen enrollment by residency at public fouryear institutions from 1992 to 2006.

New Freshmen Fall Headcount Enrollment					
Year	In- State	Out- of- State	Total		
1992	16,221	5,381	21,602		
1993	15,701	5,370	21,071		
1994	16,168	5,318	21,486		
1995	17,000	5,678	22,678		
1996	17,665	6,329	23,994		
1997	18,117	6,059	24,176		
1998	18,392	5,917	24,309		
1999	18,828	6,177	25,005		
2000	19,246	6,585	25,831		
2001	19,743	6,923	26,666		
2002	20,382	6,758	27,140		
2003	21,174	6,847	28,021		
2004	21,306	6,574	27,880		
2005	22,392	6,926	29,318		
2006	22,092	6,765	28,857		
% Change from 1992	36.2%	25.7%	33.6%		
% Change Accounted for by the Last 5 Years	29.1%	0.5%	23.7%		

Public Four-Year Institutions New Freshmen Fall Headcount Enrollment From 1992 to 2006

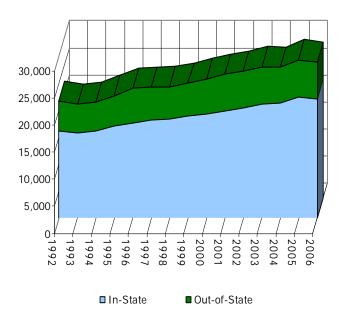


Figure 7: Public Four-Year New Freshmen Fall Headcount Enrollment from 1992 to 2006

Table 8: Public Four-Year New Freshmen Fall Headcount Enrollment from 1992 to 2006

The table below displays the total in-state new freshmen enrollment at each public four-year institution for years 1992, 1998, and 2006.

Public Four-Year Institutions, In-State New Freshmen Fall Headcount					
Institution	1992	1998	2006	% change from 1992	Student Difference from 1992
Christopher Newport University	472	677	1,104	133.9%	632
College of William and Mary	825	790	888	7.6%	63
George Mason University	1,532	1,860	1,938	26.5%	406
James Madison University	1,429	2,015	2,500	74.9%	1,071
Longwood University	660	774	935	41.7%	275
Norfolk State University	952	749	806	-15.3%	-146
Old Dominion University	1,296	1,407	1,847	42.5%	551
Radford University	1,495	1,258	1,579	5.6%	84
University of Mary Washington	483	489	639	32.3%	156
University of Virginia	1,724	1,920	1,969	14.2%	245
University of Virginia - College at Wise	322	277	383	18.9%	61
Virginia Commonwealth University	1,419	2,078	3,138	121.1%	1,719
Virginia Military Institute	217	180	217	0%	0
Virginia State University	496	517	486	-2%	-10
Virginia Tech	2,899	3,401	3,663	26.4%	764
Total	16,221	18,392	22,092	36.2%	5,871

Table 9: Public Four-Year, In-State New Freshmen Fall Headcount Enrollment, 1992, 1998, and 200

Regarding in-state new freshmen enrollment growth at the individual institutions, Christopher Newport University, James Madison University, Virginia Commonwealth University and Virginia Tech accounted for most of the total in-state growth between 1992 and 2006. In contrast, in-state new

freshmen enrollment decreased at both Norfolk State University by 15.3% or 146 students and at Virginia State University by 2% or 10 students.

The following chart and table show the proportion of in-state and out-of-state new freshmen enrollment at the public four-year institutions between the years 1992 and 2006.

New Freshmen Percentage of In-State to Out-of-State					
Year	In-State	Out-of-State			
1992	75.1%	24.9%			
1993	74.5%	25.5%			
1994	75.2%	24.8%			
1995	75.0%	25.0%			
1996	73.6%	26.4%			
1997	74.9%	25.1%			
1998	75.7%	24.3%			
1999	75.3%	24.7%			
2000	74.5%	25.5%			
2001	74.0%	26.0%			
2002	75.1%	24.9%			
2003	75.6%	24.4%			
2004	76.4%	23.6%			
2005	76.4%	23.6%			
2006	76.6%	23.4%			
	Year Percentage of In- unt Enrollment from 1	State to Out-of-State New 1992 to 2006			

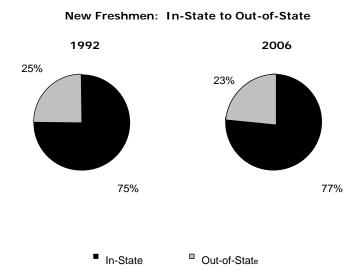


Figure 8: Public Four-Year Percentage of In-State to Out-of-State New Freshmen Fall Headcount

The proportion of in-state to out-of-state first-time freshmen has remained relatively constant over the last 15 years. In 2006, more than 75% of total first-time freshmen enrollment at public four-year institutions came from the Commonwealth. However, seven public four-year institutions' proportion of in-state new freshmen fell below the total public four-year mark. These individual institutions are: the College of William and Mary (66% in-state), James Madison University (67% in-state), University of Mary Washington (69% in-state), University of Virginia (64% in-state), Virginia Military Institute (56% in-state), Virginia State University (59% in-state), and Virginia Tech (72% in-state).

In addition, there were other notable proportional shifts at specific institutions. For example, the proportion of new in-state freshmen declined at George Mason University by 8% and at Virginia Military Institute by 6%. In contrast, Norfolk State University and Radford University's proportion of new in-state freshmen increased 14% and 9% respectively.

New Undergraduate Transfer Fall Headcount Enrollment:

From 1992 to 2006, the total number of new undergraduate transfers to public four-year institutions declined 1.1%. Between 1999 and 2000, there was a systemwide decrease of 9% in transfers. New transfer enrollments bounced back in 2001 and have since returned to previous levels.

The number of transfer students accepted varies widely among institutions based on both institutional size and mission. In 2006, three institutions, George Mason University (2,084 students), Virginia Commonwealth University (1,754 students), and Old Dominion University (1,691 students) accounted for more than half of total four-year transfers. Of the 15 public four-year institutions, Christopher Newport University has seen the largest decrease in number of transfers, declining 85.5% (763 students) since 1992. That decrease has largely been offset by a 66.4% (675 students) increase at Old Dominion University during the same time period.

The following chart and table show new undergraduate transfers enrollment at the public four-year institutions from 1992 to 2006.

	Jndergrad Headcoun		
Year	In- State	Out-of- State	Total
1992	8,409	1,466	9,875
1993	8,472	1,333	9,805
1994	8,539	1,401	9,940
1995	8,364	1,382	9,746
1996	8,352	1,502	9,854
1997	8,518	1,449	9,967
1998	8,108	1,438	9,546
1999	8,153	1,420	9,573
2000	7,407	1,288	8,695
2001	7,805	1,425	9,230
2002	7,977	1,469	9,446
2003	8,040	1,283	9,323
2004	8,326	1,233	9,559
2005	8,385	1,329	9,714
2006	8,572	1,197	9,769
% Change from 1992	1.9%	-18.3%	-1.1%
% Change Accounted for by the Last 5	34E 004	101 104	204 704
Years	365.0%	101.1%	-304.7%

Public Four-Year Institutions New Undergraduate Transfers Fall Headcount Enrollment From 1992 to 2006

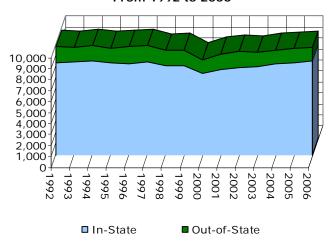


Figure 9: Public Four-Year New Undergraduate Transfers Fall Enrollment from 1992 to 2006

Table 11: Public Four-Year New Undergraduate Transfers Fall Enrollment from 1992 to 2006

Proportionally, there has been a shift toward in-state students. Since 1992, the proportion of instate transfers to out-of-state transfers shifted 3% to 87.7% in-state and to 12.3% out-of-state transfers. Three institutions experienced larger shifts toward in-state transfer students: Norfolk State University (up 21% to 80.9% in-state transfer), Christopher Newport University (up 12% to 94.6% in-state transfer), and Old Dominion University (up 11% to 88.7% in-state transfer).

New Undergraduate Transfers Percentage of In-State to Out-of-State								
Year	In-State	Out-of-State						
1992	85.2%	14.8%						
1993	86.4%	13.6%						
1994	85.9%	14.1%						
1995	85.8%	14.2%						
1996	84.8%	15.2%						
1997	85.5%	14.5%						
1998	84.9%	15.1%						
1999	85.2%	14.8%						
2000	85.2%	14.8%						
2001	84.6%	15.4%						
2002	84.4%	15.6%						
2003	86.2%	13.8%						
2004	87.1%	12.9%						
2005	86.3%	13.7%						
2006	87.7%	12.3%						

Table 12: Public Four-Year Percentage of In-State to Out-of-State New Undergraduate Transfers Fall Headcount Enrollment from 1992 to 2006

1992 2006 12%

New Undergraduate Transfers: In-State to Out-of-State

■ In-State □Out-of-State

Figure 10: Public Four-Year Percentage of In-State to Out-of-State New Undergraduate Transfers Fall Headcount Enrollment, 1992 and 2006

Transfer from Virginia Two-Year Institutions: In-depth

While the overall number of transfer students at public four-year institutions has remained relatively constant since 1993, a greater proportion of these students are now coming from the Virginia public two-year institutions. The number of Virginia two-year transfers to the Commonwealth's public four-year institutions increased 13.7% (551 students) from 1993 to 2006. The proportion of two-year transfer students to all other transfers grew by 6% to 46.9% in 2006.

Tran	sfers from Vi	rginia Two-Yea	r Publics to	Virginia Four-Ye	ar Publics
Year	Total Two-Year Transfers	Total Other Transfers	Total Transfers	% Two-Year Transfers	% Other Transfers
1993	4,032	5,773	9,805	41.1%	58.9%
1994	4,186	5,754	9,940	42.1%	57.9%
1995	4,077	5,669	9,746	41.8%	58.2%
1996	4,162	5,692	9,854	42.2%	57.8%
1997	4,238	5,729	9,967	42.5%	57.5%
1998	4,130	5,416	9,546	43.3%	56.7%
1999	3,991	5,582	9,573	41.7%	58.3%
2000	3,748	4,947	8,695	43.1%	56.9%
2001	4,041	5,189	9,230	43.8%	56.2%
2002	4,211	5,235	9,446	44.6%	55.4%
2003	4,280	5,043	9,323	45.9%	54.1%
2004	4,253	5,306	9,559	44.5%	55.5%
2005	4,430	5,284	9,714	45.6%	54.4%
2006	4,583	5,186	9,769	46.9%	53.1%
% Change from 1993	13.7%	-10.2%	-0.4%		

Table 13: Transfers from Virginia Two-Year Publics to Virginia Four-Year Publics from 1993 to 2006

Between 1993 and 2006, three public four-year institutions had the largest increase in enrollment of students from Virginia public two-year institutions: Old Dominion University (389 students), George Mason University (207 students), and James Madison University (147 students). As noted

earlier, Christopher Newport University has seen a significant reduction in enrollment of new undergraduate transfers. This trend is also reflected in transfer data from two-year institutions. In Fall 2006, Christopher Newport University enrolled 43 Virginia two-year college transfers, down from a high of 283 Virginia two-year college transfers in 1997. This decrease represents a policy choice made by Christopher Newport University prior to the Restructuring Act. In contrast, Old Dominion University, also located in the Hampton Roads region, is increasing its enrollment of two-year college transfers from 509 students in 1993 to 898 students in 2006.

Tr	ansfers fro		-Year Publ y Degree I	ics to Virginia F Details	our-Year Publ	ics:
Year	AA Degree (BA Credit)	AA Degree (Occ/Tech Credit)	No AA Degree	Total Two- Year Transfers	% AA Degree Transfers	% No AA Degree Transfers
1993	906	202	2,924	4,032	27.5%	72.5%
1994	892	246	3,048	4,186	27.2%	72.8%
1995	872	212	2,993	4,077	26.6%	73.4%
1996	861	238	3,063	4,162	26.4%	73.6%
1997	962	228	3,048	4,238	28.1%	71.9%
1998	935	214	2,981	4,130	27.8%	72.2%
1999	868	187	2,936	3,991	26.4%	73.6%
2000	894	188	2,666	3,748	28.9%	71.1%
2001	970	189	2,882	4,041	28.7%	71.3%
2002	979	216	3,016	4,211	28.4%	71.6%
2003	1,100	195	2,985	4,280	30.3%	69.7%
2004	1,118	185	2,950	4,253	30.6%	69.4%
2005	1,264	165	3,001	4,430	32.3%	67.7%
2006	1,320	203	3,060	4,583	33.2%	66.8%
% Change from 1993	45.7%	0.5%	4.7%	13.7%		
AA: Associa	te's degree;	BA: Bachelor's a	legree			

Table 14: Transfers from Virginian Two-Year Publics to Virginia Four-Year Publics by Degree Details from 1993 to 2006

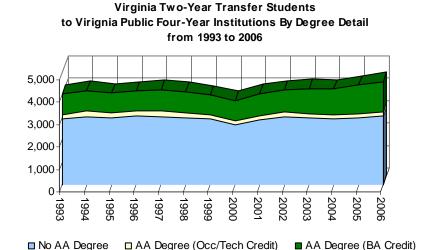


Figure 11: Transfers from Virginia Two-Year Public to Virginia Four-Year Public by Degree Details from 1993 to 2006

As seen in the table above, the majority of Virginia two-year transfer students enter Virginia public four-year institutions prior to completing their associate's degree. However, the proportion of non-associate's degree transfers has declined by 6% to 66.8% in 2006.

The number of Occupational/Technical associate's degree graduates who transfer to a Virginia public four-year institution has remained stable over the years, accounting for 4% to 6% of two-year transfers. Transfers with an associate's degree (baccalaureate credit) have grown 45.7% since 1993. Most of this increase has occurred since 2002. This appears to be a statewide trend. Except for Virginia Military Institute which does not typically accept transfers, 10 of the 15 public four-year institutions reported a gain in associate's degree (baccalaureate credit) transfers.

Graduate Fall Headcount Enrollment:

From 1987 to 2006, total graduate fall headcount enrollment rose 41.5%. As a system, the public four-year institutions accommodated an additional 13,260 graduate students, of which 8,876 were instate residents. Out-of-state graduate enrollment increased at a somewhat higher rate than did in-state, 52.8% to 37.6% respectively. Due to a greater increase in out-of-state students, there was a 2% shift in the proportion of in-state to out-of-state graduate students to 71.9% in-state and 28.1% out-of-state.

The University of Virginia's College at Wise and Virginia Military Institute do not offer graduate programs. The largest percent increases in graduate enrollment occurred at University of Mary Washington (485.3%) and Christopher Newport University (314.6%), reflecting the fact that they either began to offer graduate programs or significantly expanded their program offerings during the past 20 years. Both programs are still among the smaller ones in the system, with University of Mary Washington enrolling 679 graduate students and Christopher Newport University enrolling 170 graduate students in Fall 2006. The College of William and Mary and Virginia State University both saw a percent decrease in their total graduate fall enrollment, -6.7% and -6.8% respectively.

Nine of the 13 public four-year institutions which offer graduate programs saw a downward shift in the proportion of in-state graduate students they serve. The largest change occurred at Norfolk State University (down 20% to 72.2% in-state), James Madison University (down 14% to 75.2% in-state), the College of William and Mary (down 12% to 60.3% in-state), and University of Virginia (down 7% to 61.2% in-state). The biggest positive shifts were at Radford University (up 7% to 90.1% in-state) and University of Mary Washington (up 6% to 97.8% in-state).

The following table and chart highlight the 20-year graduate enrollment trends at Virginia public four-year universities.

Fall I	Graduate Fall Headcount Enrollment									
Year	In-State	Out-of- State	Total							
1987	23,618	8,300	31,918							
1988	23,947	8,325	32,272							
1989	25,447	8,568	34,015							
1990	26,254	8,857	35,111							
1991	27,509	8,714	36,223							
1992	28,876	8,418	37,294							
1993	29,169	8,728	37,897							
1994	29,919	8,777	38,696							
1995	30,774	9,111	39,885							
1996	30,705	9,320	40,025							
1997	31,665	9,389	41,054							
1998	31,238	9,327	40,565							
1999	29,918	9,391	39,309							
2000	29,409	9,960	39,369							
2001	30,157	10,819	40,976							
2002	31,361	11,355	42,716							
2003	32,691	11,647	44,338							
2004	32,744	11,676	44,420							
2005	32,490	12,191	44,681							
2006	32,494	12,684	45,178							
% Change from 1987-88	37.6%	52.8%	41.5%							
% Change Accounted for by the Last 5 Years			10.707							
Table 15: Public Four-Y	12.8%	30.3%	18.6%							

Public Four-Year Institutions Graduate Fall Headcount Enrollment From 1987 to 2006

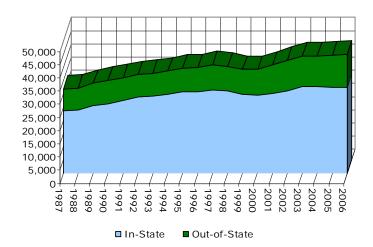


Figure 12: Public Four-Year Graduate Fall Headcount Enrollment from 1987 to 2006

Table 15: Public Four-Year Graduate Fall Headcount Enrollment from 1987 to 2006

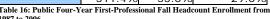
First Professional Fall Headcount Enrollment:

Five institutions in the Commonwealth offer first-professional education: the College of William and Mary, George Mason University, University of Virginia, Virginia Commonwealth University, and Virginia Tech. Over the past 20 years, total first-professional fall headcount enrollment grew by 752 students or 17.7%. Growth for out-of-state students was quite strong at 69%, while in-state first-professional enrollment declined by 2.3%. As a result, the proportion of in-state to out-of-state first-professional enrollment shifted downward by 12% to 59.7% in-state and 40.3% out-of-state in Fall 2006.

All five institutions saw positive total growth in their first-professional student population; however Virginia Commonwealth University exhibited the largest expansion with a 54.3% change from 1987 to 2006. Three institutions — College of William and Mary, George Mason University, and University of Virginia — decreased their number of in-state first-professional students. Examining the proportion of in-state to out-of-state students, four institutions saw their percent in-state shift downward: the College of William and Mary (down 21% to 44.9% in-state), George Mason University (down 24% to 66.0% in-state), University of Virginia (down 13% to 49.7% in-state), and Virginia Commonwealth University (down 14% to 66.8% in-state). At Virginia Tech, the proportion of in-state to out-of-state shifted up 25% in favor of in-state to 87.8% in-state.

The table and chart below highlight the first professional enrollment at Virginia public four-year universities from 1987 to 2006.

	First Profe Headcoun		ent
Year	In-State	Out-of- State	Total
1987	3,055	1,192	4,247
1988	3,005	1,197	4,202
1989	3,016	1,239	4,255
1990	3,122	1,207	4,329
1991	3,170	1,132	4,302
1992	3,141	1,030	4,171
1993	3,170	1,021	4,191
1994	3,146	1,081	4,227
1995	3,161	1,215	4,376
1996	3,307	1,192	4,499
1997	3,368	1,192	4,560
1998	3,363	1,249	4,612
1999	3,378	1,283	4,661
2000	3,209	1,359	4,568
2001	3,214	1,447	4,661
2002	3,203	1,578	4,781
2003	3,169	1,651	4,820
2004	3,049	1,810	4,859
2005	3,097	1,860	4,957
2006	2,985	2,014	4,999
% Change from 1987-88	-2.3%	69.0%	17.7%
% Change Accounted for by the Last			
5 Years Table 16: Public Four-Y	311.4%	53.0%	29.0%



First Professional Fall Headcount Enrollment From 1987 to 2006 5,500 4,500 4,500 4,000 3,500 3,000 2,500 2,000 1,500 1,000 500 0 1,500 1,000 500 0 1,500 1,000 500 0 1,500 1,000 500 0 1,500 1,000 500 0 1,500 1,000 500 0 1,000 1,000 500 0 1,000 1,000 500 0 1,000 1,

Out-of-State

Public Four-Year Institutions

Figure 13: Public Four-Year First-Professional Fall Headcount Enrollment from 1987 to 2006

■ In-State

Fall Headcount Undergraduate Enrollment Demographics

This section presents undergraduate demographic data at the public four-year institutions for academic years 1996, 2001, and 2006 by race/ethnicity, gender, age distribution, student load, students living on/off campus, and geographic region.

Race/Ethnicity:

Examining the years 1996, 2001, and 2006, the total undergraduate minority population increased by 7,163 students or 22.5%. The largest percent change in the 10-year period occurred with Hispanic students, increasing 86.7%, followed by Asian/Pacific Islander students with a percent increase of 35.4%. The number of foreign/international students enrolled at Virginia public four-year institutions has grown substantially, increasing 70.6% to 3,350 students. It should be noted that prior to Fall 2000, institutions were not permitted to report "Unknown" race/ethnicity data to SCHEV. Therefore, for data submitted before the year 2000, all students of unknown race/ethnicity were reported under the predominant race/ethnic group of the institution. For all institutions except for Norfolk State University

and Virginia State University, the Commonwealth's two Historically Black Colleges and Universities (HBCU), unknown race/ethnicity was reported under "White, non-Hispanic." Despite this caveat and excluding both foreign and unknown ethnicity students, the proportion of undergraduate minority students at public four-year institutions has increased to 26.5% in 2006, up almost 1% since 1996. The proportion of Hispanic students in 2006 was up one percentage point to 3.5%, while the proportion of Black, non-Hispanic students was down one percentage point to 15.2%.

In Fall 2006, excluding Virginia's two HBCU institutions, three public four-year institutions had undergraduate populations where at least one-third of their students were minority students: George Mason University (32.6%), Old Dominion University (31.8%) and Virginia Commonwealth University (33.5%). Over the 10-year period, the percent change in total minority population for non-HBCU institutions increased for all institutions except for Christopher Newport University (down 41% to 13% minority). Several institutions saw a large percent increase in their total minority population: University of Virginia at Wise (up 154.7%), Virginia Commonwealth University (up 57.2%), Radford University (up 55.1%), Old Dominion University (up 46.9%), and George Mason University (up 40.7%).

All institutions, including the two HBCU institutions, saw their Hispanic populations increase. Five institutions had a particularly large percent increase in Hispanic students over the 10-year period: Virginia Commonwealth University (up 165.5%), College of William and Mary (up 156.8%), University of Virginia (up 119.9%), Old Dominion University (up 114.8%), and Virginia Military Institute (up 100%). During this same time period, several non-HBCU institutions experienced decline in their Black, non-Hispanic student population. These institutions are: Christopher Newport University (down 56.4%), University of Mary Washington (down 27.4%), Virginia Military Institute (down 20.8%), Longwood University (down 12.7%), and James Madison University (down 10.6%).

Comparing the proportion distribution in 1996 to the distribution in 2006, there were some shifts in the ethnicity/race ratios. Several institutions saw a decline in the proportion of White, non-Hispanic students. However, some of this decline can be accounted for by the change in reporting instituted in Fall 2000 with the introduction of the "unknown" category. All institutions experienced an increase in the proportion of Hispanic students on campus. Conversely, the proportion of Black, non-Hispanic students on campus declined for several institutions, namely Christopher Newport University (down 10% to 7.2% Black, non-Hispanic), George Mason University (down 1% to 7.5% Black, non-Hispanic), James Madison University (down 2% to 3.6% Black, non-Hispanic), Longwood University (down 3% to 6.5% Black, non-Hispanic), University of Mary Washington (down 2% to 3.1% Black, non-Hispanic), University of Virginia (down 2% to 8.1% Black, non-Hispanic), Virginia Commonwealth University (down 1% to 19.8% Black, non-Hispanic), and Virginia Military Institute (down 2% to 4.4% Black, non-Hispanic).

The table and chart below illustrate the trends and proportion changes over the 10-year period of undergraduate enrollment by race/ethnicity for public four-year institutions.

Public Four-Year Institutions: Undergraduate Fall Enrollments by Race/Ethnicity For Years 1996, 2001, 2006

Year	American Indian/ Native American	Asian/ Pacific Islander	Black	Foreign/ Int'l	Hispanic	Unknown	White	Total Minority	Total
1996	543	8,015	20,480	1,964	2,751	0	89,226	31,789	122,979
% of Total	0.4%	6.5%	16.7%	1.6%	2.2%	0.0%	72.6%	25.8%	
2001	482	9,248	22,186	3,127	3,687	2,251	94,176	35,603	135,157
% of Total	0.4%	6.8%	16.4%	2.3%	2.7%	1.7%	69.7%	26.3%	
2006	555	10,853	22,409	3,350	5,135	9,931	94,877	38,952	147,110
% of Total	0.4%	7.4%	15.2%	2.3%	3.5%	6.8%	64.5%	26.5%	
% Change from 1996	2.2%	35.4%	9.4%	70.6%	86.7%	>100%	6.3%	22.5%	19.6%

Table 17: Public Four-Year Undergraduate Fall Headcount Enrollment by Ethnicity/Race, 1996, 2001, and 2006

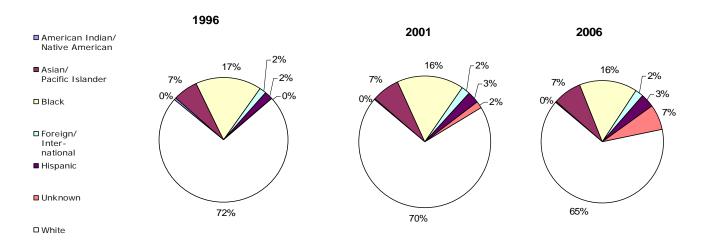


Figure 14: Public Four-Year Undergraduate Fall Headcount Enrollment by Race/Ethnicity, 1996, 2001, and 2006

Gender:

Over the past 10 years, undergraduate women enrolling at Virginia public four-year institutions increased at a faster rate than undergraduate men, 22.2% to 16.6% respectively. However, the relative proportion of men to women has only decreased one percentage point since 1996 to 45.0% men and 55.0% women in 2006.

Except for Norfolk State University, which has had declining undergraduate enrollments for both men and women, all other Virginia public four-year institutions observed percent increases in the number of men enrolled. The percent of undergraduate women increased at all Virginia public four-year institutions except for two: Christopher Newport University (down 4.7%) and the College of William and Mary (down 6.5%). In 2006, among the public four-year institutions, Virginia Military Institute has the highest percent of men at 91.6%. However, it should be noted that Virginia Military Institute did not begin admitting women until Fall 1997. Of the remaining 14 institutions, Virginia Tech enrolled the highest proportion of men at 58.3%. Four institutions enrolled less than 40% men in 2006: James Madison University (39.1% men), Longwood University (34.6% men), Norfolk State University (37.7% men), and University of Mary Washington (34.1% men).

The table and charts below highlight the systemwide trends of undergraduate enrollment by gender for public four-year institutions for years 1996, 2001, and 2006.

Public Four-Year Institutions: Undergraduate Fall Enrollments by Gender For Years 1996, 2001, 2006

Year	Men	Women	Total	% Men	% Women
1996	56,714	66,265	122,979	46.1%	53.9%
2001	60,813	74,344	135,157	45.0%	55.0%
2006	66,147	80,963	147,110	45.0%	55.0%
% Change from 1996	16.6%	22.2%	19.6%		

Table 18: Public Four-Year Undergraduate Fall Headcount Enrollment by Gender, 1996, 2001, and 2006

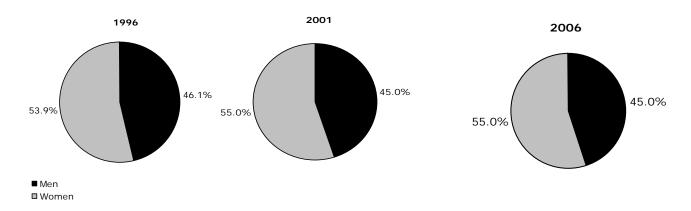


Figure 15: Public Four-Year Undergraduate Fall Headcount Enrollment by Gender, 1996, 2001, and 2006

Age Distribution:

Between 1996 and 2006, the number of undergraduate students age 24 and under in Virginia's public four-year system increased by 29,102 students or 29.1%. During that same time frame, the total population 25 and over decreased by 20.9%. Accordingly, there has been a steady shift in the proportion of students in the 24 and under group (up 7% to 87.9% in 2006).

Except for Norfolk State University which has had declining enrollment during this time period, all four-year institutions saw percent increases in students age 24 and under. All institutions exhibited a decline in their 25 and over undergraduate student population, except for George Mason University (up 3.3%), Old Dominion University (up 5.8%), and University of Virginia at Wise (up 25.5%). All institutions had their proportion of 24 and under aged students increase. Two institutions experienced large shifts: Christopher Newport University (up 35% to 95.2% age 24 and under) and Virginia Commonwealth University (up 16% to 82.3% age 24 and under).

The following table and chart demonstrate the systemwide trends of undergraduate enrollment by age distribution for the snapshot years 1996, 2001, and 2006.

Public Four-Year Institutions: Undergraduate Fall Enrollments by Age Distribution For Years 1996, 2001, 2006

Year	Tota 24 an Unde	d	Total 25 and Above	Age Unknown	Total	% Total 24 and Under	% Total 25 and Above	% Age Unknown
1996	100,	163	22,551	265	122,979	81.4%	18.3%	0.2%
2001	114,	136	20,271	750	135,157	84.4%	15.0%	0.6%
2006	129,	265	17,845	0	147,110	87.9%	12.1%	0.0%
% Chang from 199	6	1%	-20.9%	-100.0%	19.6%			

Table 19: Public Four-Year Undergraduate Fall Headcount Enrollment by Age Distribution, 1996, 2001, and 2006

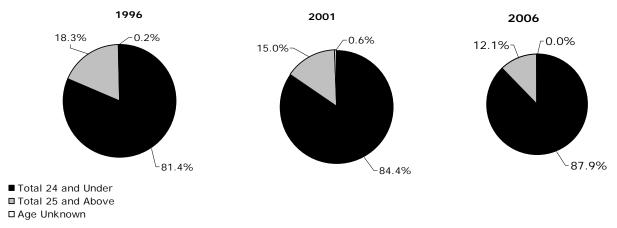


Figure 16: Public Four-Year Undergraduate Fall Headcount Enrollment by Age Distribution, 1996, 2001, and 2006

Student Load:

For years 1996, 2001, and 2006, full-time undergraduate enrollment rose at a steady pace, increasing 23.8% over the last decade. Part-time enrollment, however, has decreased 3.7% since 1996. In 2001, part-time enrollment showed an increase over 1996 levels, but has since declined.

Proportionally, full-time undergraduate enrollment now comprises 87.7% of public four-year enrollment, whereas part-time enrollment now constitutes 12.3% of public four-year enrollments. Three public four-year institutions saw larger proportional shifts in favor of full-time student enrollment: Christopher Newport University (up 28% to 93.7% full-time), Virginia Commonwealth University (up 9% to 79.9% full-time), and George Mason University (up 6% to 76.4% full-time).

The following table and chart illustrate undergraduate enrollment at public four-year institutions by student load for years 1996, 2001 and 2006.

Public Four-Year Institutions Undergraduate Fall Enrollment By Student Load For Years 1996, 2001, 2006

Year	Full- Time	Part- Time	Total	% Full- Time	% Part- Time
1996	104,154	18,825	122,979	84.7%	15.3%
2001	114,360	20,797	135,157	84.6%	15.4%
2006	128,980	18,130	147,110	87.7%	12.3%
% Change from 1996	23.8%	-3.7%	19.6%		

Table 20: Public Four-Year Undergraduate Fall Headcount Enrollment by Student Load, 1996, 2001, and 2006

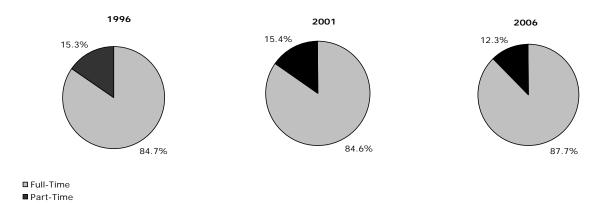


Figure 17: Public Four-Year Undergraduate Fall Headcount Enrollment by Student Load, 1996, 2001, and 2006

Students Living On/Off Campus:

From 1996 to 2006, undergraduate students at public four-year institutions living on campus increased 31.7%, while students living off campus, increased by only 13.5 %. Of the public four-year institutions, Christopher Newport University experienced the largest percent increase of students living on campus, up 624.9%. Their resulting proportion of students living on-campus was up 51% to a total of 59.7% of students living on campus in 2006.

Other institutions saw a larger percent change in students living on campus, including Virginia Commonwealth University (up 129.1%), Old Dominion University (up 79.3%), Virginia State University (up 75.7%), and George Mason University (up 73.6%). Institutions with the highest ratio of students living on campus are Virginia Military Institute (100%), College of William and Mary (75.3%), and Longwood University (70.9%). Old Dominion University (21.5%), Virginia Commonwealth University (21.7%), and George Mason University (22.6%) have the lowest percentage of students living on-campus.

The following table and chart depict undergraduate enrollment at public four-year institutions by students living on/off campus residency for the years 1996, 2001, and 2006.

Public Four-Year Institutions Undergraduate Fall Enrollment By Living On/Off Campus For Years 1996, 2001, 2006

Year	On- Campus	Off- Campus	Total	% On- Campus	% Off- Campus
1996	41,498	81,481	122,979	33.7%	66.3%
2001	49,107	86,050	135,157	36.3%	63.7%
2006	54,660	92,450	147,110	37.2%	62.8%
% Change					
from 1996	31.7%	13.5%	19.6%		

Table 21: Public Four-Year Undergraduate Fall Headcount Enrollment by Student's Living On/Off Campus 1996, 2001, and 2006

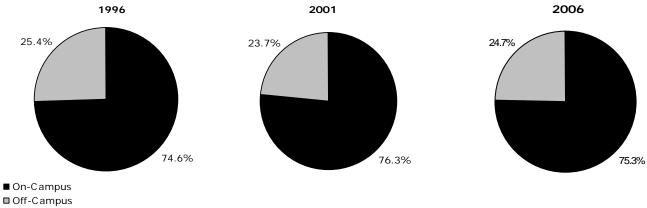


Figure 18: Public Four-Year Undergraduate Fall Headcount Enrollment by Student's Living On/Off Campus 1996, 2001, and 2006

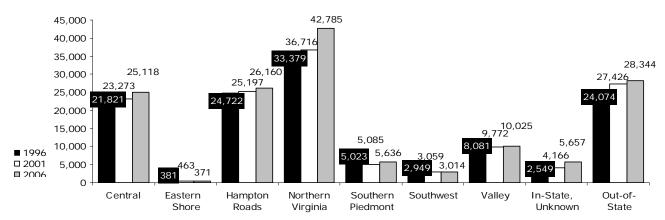
Geographic Region:

Overall, undergraduate enrollment at public four-year institutions increased from every Virginia geographic region (see appendix 1 for a map of Virginia regions) except for the Eastern Shore, which recorded a decrease of 2.6%. Although enrollment at public four-year institutions from the Eastern Shore decreased in the last decade, enrollments from this region increased 28.6% at the public two-year institutions. At public four-year institutions in Virginia enrollments from Northern Virginia (28.2%), Valley (24.1%) and Central (15.1%) regions grew at a faster rate than the remaining geographic regions in the state.

The geographic composition of students enrolled at Christopher Newport University changed dramatically over the past 10 years. Christopher Newport University experienced a 57% decrease in students from Hampton Roads, but saw enormous percent change increases in students from the following regions: Valley (3460.0%), Northern Virginia (2507.4%), and Southern Piedmont (1500.0%). Given these large percent increase Christopher Newport University has experienced some shifts in the proportion of students from the various regions of the state. Between 1996 and 2006, the largest proportional shifts occurred in students from Hampton Roads (down 48% to 32.6%), Northern Virginia (up 37% to 38.4%), and Central (up 8% to 17.8%).

The following table and chart depict undergraduate enrollment at public four-year institutions by geographic region for the years 1996, 2001, and 2006.

Public Four-Year Institutions Undergraduate Fall Enrollment By Geographic Region For Years 1996, 2001, and 2006



Figure~19:~Public~Four-Year~Undergraduate~Fall~Head count~Enrollment~by~Geographic~Region,~1996,~2001,~and~2006,~2006,

Year	Central	Eastern Shore	Hampton Roads	Northern Virginia	Southern Piedmont	Southwest	Valley	In-State, Unknown	Out-of- State	Total
1996	21,821	381	24,722	33,379	5,023	2,949	8,081	2,549	24,074	122,979
% of Total	17.7%	0.3%	20.1%	27.1%	4.1%	2.4%	6.6%	2.1%	19.6%	
2001	23,273	463	25,197	36,716	5,085	3,059	9,772	4,166	27,426	135,157
% of Total	17.2%	0.3%	18.6%	27.2%	3.8%	2.3%	7.2%	3.1%	20.3%	
2006	25,118	371	26,160	42,785	5,636	3,014	10,025	5,657	28,344	147,110
% of Total	17.1%	0.3%	17.8%	29.1%	3.8%	2.1%	6.8%	3.7%	19.3%	
% Change from 1996	15.1%	-2.6%	5.8%	28.2%	12.2%	2.2%	24.1%	121.9%	17.7%	19.6%

Table 22: Public Four-Year Undergraduate Fall Headcount Enrollment by Geographic Region, 1996, 2001, and 2006

TOTAL PUBLIC TWO-YEAR SUMMARY

Annualized FTE Enrollment

Undergraduate Annualized FTE Enrollment:

Since 1987-88, total FTE enrollment at public two-year institutions increased by 35,159 FTE or 59.6%. In-state FTE enrollment at public two-year colleges increased by 33,587 FTE or 59.9%, while out-of-state FTE grew by 1,573 FTE or 53.9%. Out-of-state FTE enrollment grew steadily until 2003-04, when FTE enrollment dropped from 6,158 FTE to 4,907 FTE. In 2004-05, out-of-state FTE continued its decline. However, 2005-06 saw a reversal and out-of-state FTE rose to 4,493 FTE. It should be noted that these years coincide with a data system conversion at the Virginia Community College System (VCCS), and these numbers likely contain errors regarding student domicile status. Nevertheless, with the decline and slight upward trend in 2005-06 FTE enrollments, out-of-state enrollments represent less than 5% of overall FTE enrollment. Virginia residents still represent 95% of annualized FTE enrollment at these institutions. This ratio has remained relatively constant over the 19year period.

The following table and chart show total undergraduate FTE enrollment at public two-year institutions from 1987-88 to 2005-06.

Undergraduate Annualized FTE Enrollment					
Year	In- State	Out-of- State	Total	% In- State	% Out- of-State
1987-88	56,101	2,920	59,021	95.1%	4.9%
1988-89	59,976	2,826	62,802	95.5%	4.5%
1989-90	66,962	3,495	70,457	95.0%	5.0%
1990-91	69,477	3,422	72,899	95.3%	4.7%
1991-92	72,215	3,851	76,066	94.9%	5.1%
1992-93	73,147	3,767	76,914	95.1%	4.9%
1993-94	72,999	3,806	76,806	95.0%	5.0%
1994-95	71,187	3,909	75,096	94.8%	5.2%
1995-96	69,843	4,082	73,925	94.5%	5.5%
1996-97	68,437	4,245	72,682	94.2%	5.8%
1997-98	71,042	4,480	75,522	94.1%	5.9%
1998-99	73,673	4,886	78,560	93.8%	6.2%
1999-00	76,399	5,368	81,768	93.4%	6.6%
2000-01	78,273	5,606	83,879	93.3%	6.7%
2001-02	84,538	5,948	90,486	93.4%	6.6%
2002-03	87,640	6,158	93,799	93.4%	6.6%
2003-04	88,412	4,907	93,319	94.7%	5.3%
2004-05	89,966	3,806	93,773	95.9%	4.1%
2005-06	89,688	4,493	94,180	95.2%	4.8%
% Change from 1987-88	59.9%	53.9%	59.6%		
% Change Accounted for by the Last					
5 Years Table 23: Public Two-Year	15.3%	-92.6%	10.5%	6	

Public Two-Year Institutions Undergraduate Annualized FTE Enrollment From 1987-88 to 2005-06

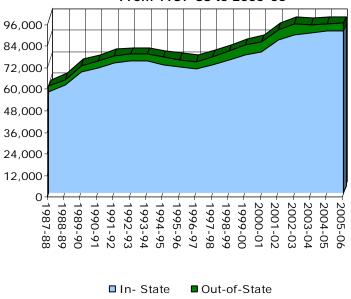


Figure 20: Public Two-Year Undergraduate FTE Enrollment from 1987-88 to 2005-06

Fall Headcount Enrollment

Undergraduate Fall Headcount Enrollment:

Total enrollment at public two-year institutions increased from 123,987 students in Fall 1987 to 160,570 students in Fall 2006, an increase of 29.5%. During the same time period, in-state fall headcount grew by 29.2%, accommodating an additional 34,291 students. Out-of-state fall headcount also grew at a strong rate of 35.3% or 2,292 students.

The proportion of in-state to out-of-state fall headcount enrollment has remained constant at 95% in-state to 5% out-of-state. In Fall 2004 and Fall 2005, the proportion varied from that norm, but again this variation may be due to errors incurred during VCCS data system conversion. Data from Richard Bland College did not impact the 2004 and 2005 proportional deviation.

The table and chart below display total undergraduate enrollment at public two-year institutions from 1987 to 2006.

Undergraduate Fall Headcount Enrollment									
Year	Year In- Out-of- State State Total								
1987	117,488	6,499	123,987	94.8%	5.2%				
1988	110,267	5,933	116,200	94.9%	5.1%				
1989	122,147	7,216	129,636	94.2%	5.6%				
1990	124,443	6,640	131,083	94.9%	5.1%				
1991	127,865	7,009	134,874	94.8%	5.2%				
1992	127,103	7,001	134,104	94.8%	5.2%				
1993	124,197	7,046	131,243	94.6%	5.4%				
1994	123,403	7,330	130,733	94.4%	5.6%				
1995	120,887	7,458	128,345	94.2%	5.8%				
1996	117,237	7,366	124,603	94.1%	5.9%				
1997	122,615	7,797	130,412	94.0%	6.0%				
1998	124,523	8,008	132,531	94.0%	6.0%				
1999	127,960	8,301	136,261	93.9%	6.1%				
2000	129,842	8,197	138,039	94.1%	5.9%				
2001	137,359	8,606	145,965	94.1%	5.9%				
2002	142,615	8,706	151,321	94.2%	5.8%				
2003	145,741	7,844	153,585	94.9%	5.1%				
2004	147,861	5,865	153,726	96.2%	3.8%				
2005	150,431	4,538	154,969	97.1%	2.9%				
2006	151,779	8,791	160,570	94.5%	5.5%				
% Change from 1987-88	29.2%	35.3%	29.5%						
% Change Accounted for by the Last 5 Years	26.7%	3.7%	25.3%						

Table 24: Public Two-Year Undergraduate Fall Headcount Enrollment from 1987 to 2006

Public Two-Year Institutions Undergraduate Fall Headcount Enrollment From 1987 to 2006

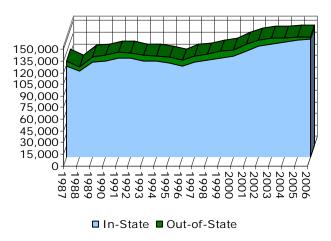


Figure 21: Public Two-Year Undergraduate Fall Headcount Enrollment from 1987 to 2006

Fall Headcount New Freshmen Enrollment:

The following table and chart illustrate total new freshmen at public two-year institutions from 1992 to 2006.

New Freshmen Fall Headcount Enrollment								
Year	In- State	Out-of- State	Total					
1992	12,396	900	13,296					
1993	12,353	924	13,277					
1994	12,238	858	13,096					
1995	11,662	822	12,484					
1996	11,409	810	12,219					
1997	11,560	827	12,387					
1998	12,671	913	13,584					
1999	12,525	928	13,453					
2000	12,742	977	13,719					
2001	13,839	1,041	14,880					
2002	13,890	1,049	14,939					
2003	16,092	961	17,053					
2004	19,295	667	19,962					
2005	18,936	543	19,479					
2006	23,862	2,117	25,979					
% Change from 1992	92.5%	135.2%	95.4%					
% Change Accounted for by the Last 5 Years	87.0%	87.8%	87.0%					

Table 25: Public Two-Year New Freshmen Fall Headcount Enrollment from 1992 to 2006

Public Two-Year Institutions New Freshmen Fall Headcount Enrollment From 1992 to 2006

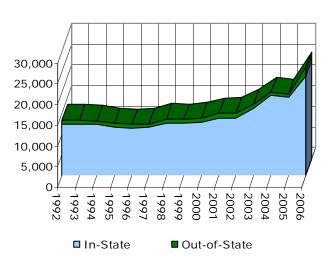


Figure 22: Public Two-Year New Freshmen Fall Headcount Enrollment from 1992 to 2006

First-time freshmen headcount enrollment at the public two-year institutions experienced a 95.4% increase from 1992 to 2006. This increase is primarily driven by the VCCS. Between 1992 and 2002, the growth in total new freshmen enrollment was mostly minimal. However, between 2002 and 2003, total new freshmen enrollment grew by 14%, (2,114 students) and between 2003 and 2004, total new freshmen enrollment increased by 17%, (2,909 students).

In 2006, the VCCS changed its reporting of new freshmen to comply with the Integrated Postsecondary Reporting Data System (IPEDS) and SCHEV's reporting guidelines. For at least the past decade, VCCS has misreported freshmen who entered during summer term. In addition, entering freshmen who had participated in high school dual enrollment programs were not counted as first-time freshmen in their first fall semester of regular community college enrollment. As a result, the 33% increase in total public two-year new freshmen enrollment between the years 2005 and 2006 should be interpreted as inaccurate. While it is clear the VCCS is enrolling more new freshmen, the rate of increase is not as steep as it appears.

Over the last 15 years, in-state first-time freshmen enrollment grew at a slower rate than out-of-state first-time freshmen enrollment. Specifically, in-state new freshmen enrollment increased by 11,466 students, or 92.5%, while out-of-state first-time student enrollment grew by 1,217 students, or

135.2%. In the public two-year sector, a substantial amount of the in-state first-time freshmen enrollment growth from 1992 to 2006 can be attributed to the Virginia community colleges rather than Richard Bland College. In-state new freshmen enrollment at the community colleges increased by 96% (11,496 students), whereas out-of-state first-time freshmen grew by 137.5% (1,224 students). Concurrently, Richard Bland College experienced a 7.1% decrease in in-state new freshmen enrollment, 30 students in total. Out-of-state new freshmen enrollment at Richard Bland College decreased by 70%, 7 students in total.

The table below shows the total in-state new freshmen enrollment at each community college for years 1992, 1998, and 2006. As noted above, due to errors in previous VCCS new freshmen reporting, the data for 1992 and 1998 should be interpreted with caution.

Virginia Community Colleges, In-state New Freshmen Fall Headcount								
Institution	1992	1992 1998		% change from 1992	Student Difference from 1992			
Blue Ridge	292	297	729	149.7%	437			
Central Virginia	209	319	710	239.7%	501			
Dabney S. Lancaster	225	155	213	-5.3%	-12			
Danville	371	298	540	45.6%	169			
Eastern Shore	103	125	175	69.9%	72			
Germanna	267	444	1,016	280.5%	749			
J. Sargeant Reynolds	559	964	1,216	117.5%	657			
John Tyler	250	240	898	259.2%	648			
Lord Fairfax	339	436	910	168.4%	571			
Mountain Empire	568	428	506	-10.9%	-62			
New River	433	332	534	23.3%	101			
Northern Virginia	3,112	2,258	6,088	95.6%	2,976			
Patrick Henry	298	164	468	57.0%	170			
Paul D Camp	184	179	256	39.1%	72			
Piedmont Virginia	350	311	657	87.7%	307			
Rappahannock	21	162	362	1623.8%	341			
Southside Virginia	459	224	586	27.7%	127			
Southwest Virginia	569	492	513	-9.8%	-56			
Thomas Nelson	978	964	1,442	47.4%	464			
Tidewater	1,236	2,316	3,981	222.1%	2,745			
Virginia Highland	328	316	364	11%	36			
Virginia Western	646	631	929	43.8%	283			
Wytheville	174	181	374	114.9%	200			
Total	11,971	12,236	23,467	96.0%	11,496			

Table 26: Virginia Community Colleges, In-State New Freshmen Fall Headcount Enrollment, 1992, 1998, and 2006

Seven out of the 23 community colleges grew by more than 500 in-state new freshmen between 1992 and 2006: Central Virginia CC (501 students), Germanna CC (749 students), J. Sargeant Reynolds CC (657 students), John Tyler CC (648 students), Lord Fairfax CC (571 students), Northern Virginia CC (2,976 students), and Tidewater CC (2,745 students). A significant amount of in-state new freshmen growth has come from community colleges positioned along the I-95/I-64 crescent, where much of the Commonwealth's growth in overall population is occurring. The notable exception is Central Virginia CC, which is not located along this corridor.

The table and chart below display the proportion of in-state to out-of-state first-time freshmen from the public two-year sector from 1992 to 2006.

New Freshmen Percentage of In-State to Out-of-State								
Year	In-State	Out-of-State						
1992	93.2%	6.8%						
1993	93.0%	7.0%						
1994	93.4%	6.6%						
1995	93.4%	6.6%						
1996	93.4%	6.6%						
1997	93.3%	6.7%						
1998	93.3%	6.7%						
1999	93.1%	6.9%						
2000	92.9%	7.1%						
2001	93.0%	7.0%						
2002	93.0%	7.0%						
2003	94.4%	5.6%						
2004	96.7%	3.3%						
2005	97.2%	2.8%						
2006	91.9%	8.1%						

Table 27: Public Two-Year Percentage of In-State to Out-of-State New Freshmen Fall Headcount Enrollment from 1992 to 2006

1992 2006 93%

Out-of-State

New Freshmen: In-State to Out-of-State

Figure 23: Public Two-Year Percentage of In-State to Out-of-State New Freshmen Fall Headcount Enrollment, 1992 and 2006

In-State

Between 1992 and 2006, the proportion of in-state to out-of-state first-time freshmen at the public two-year institutions has remained relatively constant, with a one percentage-point decrease in the proportion of in-state first-time freshmen. In 2006, the proportion of in-state to out-of-state first-time freshmen was 92% in-state to 8% out-of-state students.

The table below displays in-state new freshmen enrolled at the public four-year and two-year sectors between 1992 and 2006. The in-state new freshmen figures are further divided to show the number of matriculants who graduated high school in the past 12 months and the number who graduated high school more than 12 months prior to entering postsecondary education.

Virginia In-State New Freshmen Fall Headcount By Public Sector									
		Four-Year		Two-Year					
Fall Term	Grad HS within 12 Months	Did Not Grad HS within 12 Months	Total New Freshmen	Grad HS within 12 Months	Did Not Grad HS within 12 Months	Total New Freshmen	Grand Total		
1992	15,463	758	16,221	5,910	6,486	12,396	28,617		
1993	13,256	2,445	15,701	5,793	6,560	12,353	28,054		
1994	15,351	817	16,168	6,286	5,952	12,238	28,406		
1995	16,014	986	17,000	6,876	4,786	11,662	28,662		
1996	16,775	890	17,665	6,731	4,678	11,409	29,074		
1997	17,310	807	18,117	7,002	4,558	11,560	29,677		
1998	17,591	801	18,392	7,834	4,837	12,671	31,063		
1999	18,100	728	18,828	7,767	4,758	12,525	31,353		
2000	18,791	455	19,246	6,514	6,228	12,742	31,988		
2001	19,148	595	19,743	8,340	5,499	13,839	33,582		
2002	19,835	547	20,382	6,591	7,299	13,890	34,272		
2003	20,551	623	21,174	8,730	7,362	16,092	37,266		
2004	20,303	1,003	21,306	11,091	8,204	19,295	40,601		
2005	21,413	979	22,392	10,317	8,619	18,936	41,328		
2006	19,538	2,554 Fall Headcount Enrollment by	22,092	14,639	9,223	23,862	45,954		

It is interesting to note that the overall proportion of new in-state freshmen enrollment at the public four-year institutions declined from 57% to 48% while public two-year enrollment increased from 43% to 52% from 1992 to 2006. Of the in-state new freshmen who graduated high school within the past 12 months, most still begin at public four-year institutions, but the two-year sector has made substantial gains with this sub-population. As noted previously, the VCCS altered its classification of new freshmen in 2006 in order to comply with national and state reporting standards. Therefore the public two-year new freshmen numbers displayed in the above table contain inaccurate data and should be interpreted with caution.

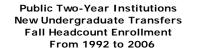
New Undergraduate Transfer Fall Headcount Enrollment:

The number of transfers to two-year colleges has declined 4% since 1992. A large reduction in enrolled transfers occurred between 2002 and 2003 at both Virginia community colleges and Richard Bland College resulting in a substantial 24% decrease in transfers to public two-year institutions. Instate transfers bounced back in 2004 and have since returned to previous levels. Out-of-state transfers, however, experienced another significant decline in 2004, dropping nearly in half from the previous year. Despite a significant increase in out-of-state transfers in 2006, the number of out-of-state new undergraduate transfers is 20% lower than 2001 levels. These years coincide with the VCCS data system conversion and these numbers may contain errors.

The following table and chart illustrate the total undergraduate new transfer enrollment from the public two-year sector from 1992 to 2006.

New Undergraduate Transfers Fall Headcount Enrollment							
Year	In- State	Out-of- State	Total				
1992	11,422	1,964	13,386				
1993	10,736	1,950	12,686				
1994	11,088	2,129	13,217				
1995	10,821	2,076	12,897				
1996	10,252	2,002	12,254				
1997	11,005	2,216	13,221				
1998	11,133	2,208	13,341				
1999	10,994	2,093	13,087				
2000	11,111	2,090	13,201				
2001	11,137	2,096	13,233				
2002	11,068	2,062	13,130				
2003	8,660	1,280	9,940				
2004	10,526	646	11,172				
2005	12,170	744	12,914				
2006	11,165	1,688	12,853				
% Change from 1992	-2.3%	-14.1%	-4.0%				
% Change Accounted for by the							
Last 5 Years Table 29: Public Two-Ye	-37.7%	135.5%	52.0%				

from 1992 to 2006



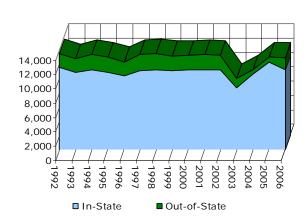


Figure 24: Public Two-Year New Undergraduate Transfer Fall Headcount Enrollment from 1992 to 2006

The table and chart below display the proportion of in-state to out-of-state new undergraduate transfers from the public two-year institutions from 1992 to 2006.

New Undergraduate Transfers Percentage of In-State to Out-of-State								
Year	In-State	Out-of-State						
1992	85.3%	14.7%						
1993	84.6%	15.4%						
1994	83.9%	16.1%						
1995	83.9%	16.1%						
1996	83.7%	16.3%						
1997	83.2%	16.8%						
1998	83.4%	16.6%						
1999	84.0%	16.0%						
2000	84.2%	15.8%						
2001	84.2%	15.8%						
2002	84.3%	15.7%						
2003	87.1%	12.9%						
2004	94.2%	5.8%						
2005	94.2%	5.8%						
2006	86.9%	13.1%						

Table 30: Public Two-Year Percentage of In-State to Out-of-State New Undergraduate Transfer Fall Headcount Enrollment from 1992 to 2006

New Undergraduate Transfers: In-State to Out-of-State

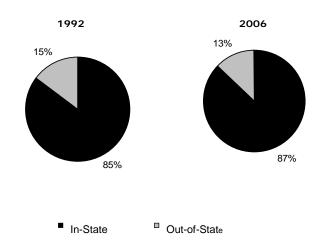


Figure 25: Public Two-Year Percentage of In-State to Out-of-State New Undergraduate Transfer Fall Headcount Enrollment, 1992 and 2006

Between 1992 and 2006, the proportion of in-state to out-of-state new undergraduate transfers at the public two-year institutions has remained relatively constant, with a two percentage-point increase in the proportion of in-state undergraduate new transfers. The years 2004 and 2005 vary from the pattern with a large decrease in out-of-state new undergraduate transfers. Again these numbers coincide with the years of VCCS data system conversion and may contain errors. In 2006, the proportion of in-state to out-of-state undergraduate new transfers returned to a more consistent 87% in-state to 13% out-of-state students.

Fall Headcount Enrollment Demographics

This section presents undergraduate demographic data at the public two-year institutions for academic years 1996, 2001, and 2006 by race/ethnicity, gender, age distribution, student load, students living on/off campus, and geographic region.

Ethnicity/Race:

Total minority enrollment increased by 19,139 students or 63.4% at public two-year institutions. The largest increases were among Hispanic students (105.1%) and Black, non-Hispanic students (63.3%). Enrollment among Foreign/International students declined significantly from 2,007 students in 2001 to 1,460 students in 2006.

The Virginia community college undergraduate population mirrors the overall public two-year ethnicity/race trends. The total number of minority students at the community colleges grew by 64.3% between 1996 and 2006. However, at Richard Bland College, total minority enrollment declined slightly by 2%. Richard Bland College's largest decreases in specific minority categories include Asian/Pacific Islander students (28.0%) and Black, non-Hispanic students (7%). In contrast, Hispanic (88%) and White, non-Hispanic (14%) student enrollment has increased during this time period.

The table and chart below show undergraduate fall enrollment at public two-year institutions by ethnicity and race for 1996, 2001 and 2006.

Public Two-Year Institutions Undergraduate Fall Enrollment By Ethnicity/Race For Years 1996, 2001, 2006

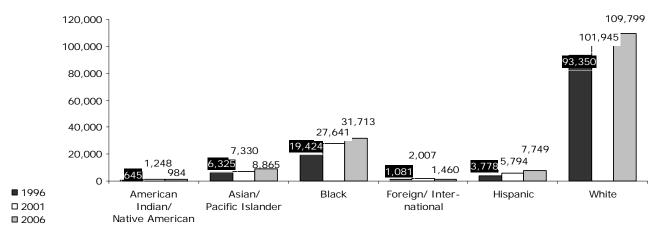


Figure 26: Public Two-Year Undergraduate Fall Headcount Enrollment by Ethnicity/Race, 1996, 2001, and 2006

Year	American Indian/ Native American	Asian/ Pacific Islander	Black	Foreign/ Int'l	Hispanic	Unknown	White	Total Minority	Total
1996	645	6,325	19,424	1,081	3,778	0	93,350	30,172	124,603
% of Total	0.5%	5.1%	15.6%	0.9%	3.0%	0.0%	74.9%	24.2%	
2001	1,248	7,330	27,641	2,007	5,794	0	101,945	42,013	145,965
% of Total	0.9%	5.0%	18.9%	1.4%	4.0%	0.0%	69.8%	28.8%	
2006	984	8,865	31,713	1,460	7,749	0	109,799	49,311	160,570
% of Total	0.6%	5.5%	19.8%	0.9%	4.8%	0.0%	68.4%	30.7%	
% Change from 1996	52.6%	40.2%	63.3%	35.1%	105.1%	0.0%	17.6%	63.4%	28.9%

Table 31: Public Two-Year Undergraduate Fall Enrollment by Ethnicity/Race, 1996, 2001, and 2006

Gender:

Female undergraduate enrollment at public two-year institutions continues to outnumber the enrollment of men, with 66,354 men to 94,216 women in Fall 2006. However, over the 10-year period, the proportion of men and women at the public two-year colleges has remained unchanged at 41% men to 59% women. Once again, the Virginia Community College System mirrors the statistics for the public two-year data. Richard Bland College has a larger gender gap, enrolling 36.3% men to 63.7% women in Fall 2006.

These trends in gender enrollment are depicted in the following tables and charts for years 1996, 2001 and 2006.

Public Two-Year Institutions Undergraduate Fall Enrollment By Gender For Years 1996, 2001, 2006

Year	Men	Men Women Tota		% Men	% Women		
1996	51,495	73,108	124,603	41.3%	58.7%		
2001	59,845	86,120	145,965	41.0%	59.0%		
2006	66,354	94,216	160,570	41.3%	58.7%		
% Change							
from 1996							
	28.9%	28.9%	28.9%				

Table 32: Public Two-Year Undergraduate Fall Headcount Enrollment by Gender 1996, 2001, and 2006

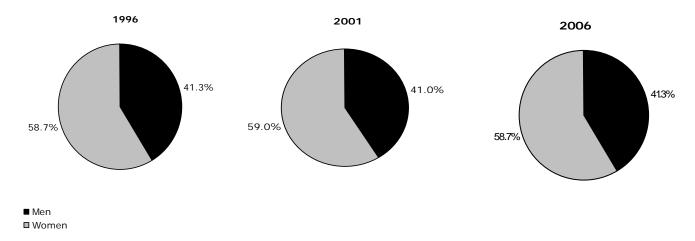


Figure 27: Public Two-Year Undergraduate Fall Headcount Enrollment by Gender 1996, 2001, and 2006

Age Distribution:

Enrollment patterns by age distribution at public two-year institutions from 1996 to 2006 indicate that students age 24 and under enrolled at a faster rate than students 25 and above. Specifically, undergraduate students age 24 and under increased by 70.1%, while students 25 and older decreased by 6.1% during that same time period.

In 1996, students 25 and above comprised 54.1% of the total undergraduate population at public two-year institutions. However, 10 years later students 25 and above constituted only 39.4% of the total undergraduate population at public two-year institutions. This represents a decline of 15%. The Virginia community colleges account for much of the change in the proportion of non-traditional-aged to traditional-aged students at the public two-year institutions. Though Richard Bland College reflects similar age distribution trends, its proportion of students age 24 and under has been much larger than students in the Virginia Community College System. In Fall 2006, students age 24 and under at Richard Bland College made up 87.2% of the population, while students 25 and above comprised 12.8% of the population.

The following table and chart display age distribution enrollment at public two-year institutions for years 1996, 2001 and 2006.

Public Two-Year Institutions Undergraduate Fall Enrollment By Age Distribution For Years 1996, 2001, 2006

Year	Total 24 and Under	Total 25 and Above	Age Unknown	Total	% Total 24 and Under	% Total 25 and Above	% Age Unknown
1996	57,208	67,372	23	124,603	45.9%	54.1%	0.0%
2001	76,087	69,877	1	145,965	52.1%	47.9%	0.0%
2006	97,310	63,260	0	160,570	60.6%	39.4%	0.0%
% Change from 1996	70.1%	-6.1%	-100.0%	28.9%			

Table 33: Public Two-Year Undergraduate Fall Headcount Enrollment by Age Distribution 1996, 2001, and 2006

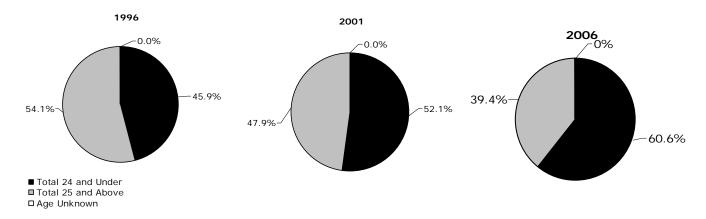


Figure 28: Public Two-Year Undergraduate Fall Headcount Enrollment by Age Distribution, 1996, 2001, and 2006

Student Load:

Over the last decade, full-time undergraduate enrollment at public two-year institutions increased by 47.7%, while part-time undergraduates enrollment increased by 21.6%. However, even though full-time undergraduate students grew at a greater rate than part-time students, there has only been a slight increase of 4% in the proportion of full-time undergraduate students enrolled at public two-year institutions between 1996 and 2006. Currently, undergraduate students enrolled part-time still make up 68.3% of the public two-year population. While Richard Bland College enrolls more full-time than part-time students, the institution has seen a decrease in full-time enrollment (down 4% to 58.6% full-time) during this period.

The table and chart below outline student load enrollment at public two-year institutions for years 1996, 2001 and 2006.

Public Two-Year Institutions Undergraduate Fall Enrollment By Student Load For Years 1996, 2001, 2006

: 0: : 00: 0 : ; 70 200 : ; 2000								
Year	Full- Time	Part- Time	Total		% Part- Time			
1996	34,465	90,138	124,603	27.7%	72.3%			
2001	43,228	102,737	145,965	29.6%	70.4%			
2006	50,918	109,652	160,570	31.7%	68.3%			
% Change from 1996	47.7%	21.6%	28.9%					

Table 34: Public Two-Year Undergraduate Fall Headcount Enrollment by Student Load 1996, 2001, and 2006

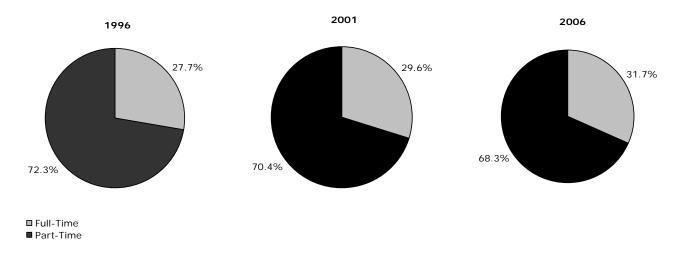


Figure 29: Public Two-Year Undergraduate Fall Headcount Enrollment by Student Load, 1996, 2001, and 2006

Student Living On/Off Campus:

There is currently no on-campus housing at the public two-year institutions. Therefore, 100% of undergraduate students enrolled at both Virginia community colleges and Richard Bland College live off campus. However, Richard Bland College is in the process of building student housing.

The table below shows undergraduate fall enrollment at public two-year institutions by students living on/off campus for years 1996, 2001 and 2006.

Public Two-Year Institutions
Undergraduate Fall Enrollment By Students Living On/Off Campus
For Years 1996, 2001, 2006

Year	On- Campus	Off- Campus	Total	% On- Campus	% Off- Campus
1996	0	124,603	124,603	0.0%	100.0%
2001	0	145,965	145,965	0.0%	100.0%
2006	0	160,570	160,570	0.0%	100.0%
% Change from 1996	0.0%	28.9%	28.9%		

Table 35: Public Two-Year Undergraduate Fall Headcount Enrollment by Student's Living On/Off Campus 1996, 2001, and 2006

Geographic Region:

2001

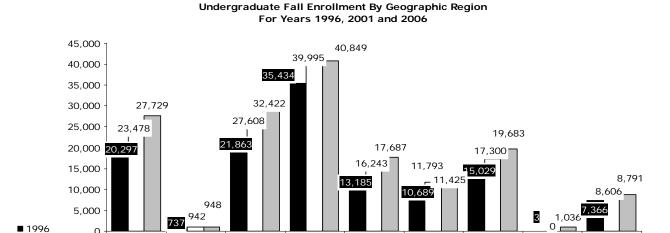
2006

Between 1996 and 2006, the number of students attending public two-year institutions from six of the seven Virginia regions grew by 10%. (See Appendix 1 for map of Virginia regions.) The Southwest region is the one exception, as the number of students from this region increased by only 6.9%. Students from the Hampton Roads region had the largest percent increase in enrollment (48.3%), followed by Central Virginia (36.6%), Southern Piedmont (34.1%), Valley (31.0%), Eastern Shore (28.6%), and Northern Virginia (15.3%).

While the students from the Northern Virginia region still constitute the largest proportion of undergraduate students enrolled at public two-year institutions (25.4%), this proportion has decreased 3% over the last decade. The Central and Hampton Roads regions have made the most gains in the proportion of undergraduate students enrolled at public two-year institutions, 1% and 3% respectively.

The table and chart below display undergraduate enrollment at public two-year institutions by geographic region for years 1996, 2001 and 2006.

Public Two-Year Institutions



Northern

Figure 30: Public Two-Year Undergraduate Fall Headcount Enrollment by Geographic Region, 1996, 2001, and 2006

Hampton

Fastern

Shore

Central

<u>Year</u>	<u>Central</u>	Eastern Shore	Hampton Roads	Northern Virginia	Southern Piedmont	Southwest	Valley	In-State, Unknown	Out-of- State	Total
1996	20,297	737	21,863	35,434	13,185	10,689	15,029	3	7,366	124,603
% of Total	16.3%	0.6%	17.5%	28.4%	10.6%	8.6%	12.1%	0.0%	5.9%	
2001	23,478	942	27,608	39,995	16,243	11,793	17,300	0	8,606	145,965
% of Total	16.1%	0.6%	18.9%	27.4%	11.1%	8.1%	11.9%	0.0%	5.9%	
2006	27,729	948	32,422	40,849	17,687	11,425	19,683	1,036	8,791	160,570
% of Total	17.3%	0.6%	20.2%	25.4%	11.0%	7.1%	12.3%	0.6%	5.5%	
% Change from 1996	36.6%	28.6%	48.3%	15.3%	34.1%	6.9%	31.0%	>100%	19.3%	28.9%

Southern

Piedmont

Southwest

Valley

In-State

Unknown

Out-of-

State

Table 36: Public Two-Year Undergraduate Fall Headcount Enrollment by Geographic Region, 1996, 2001, and 2006

VIRGINIA TRENDS: FOCUS AREAS

VIRGINIA TRENDS IN FOCUS AREAS: HIGH SCHOOL DUAL ENROLLMENT

The number of students in high school dual enrollment programs is on the rise. Dual enrollment programs involve high school students who are concurrently enrolled in courses for high school and college credit. Experts view dual enrollment as "providing high school students benefits such as greater access to a wider range of rigorous academic and technical courses, savings in time and money on a college degree, promoting efficiency of learning, and enhancing admission to and retention in college". Policymakers on the national and regional level advocate such programs as a means of strengthening the high school curriculum and encouraging both high school and college completion.

Virginia has been working with dual enrollment policies for more than two decades. According to Catron (1998), Virginia has had a plan for Dual Enrollment since 1988. In 2005, then Secretary of Education Wheelan, Superintendent of Instruction DeMary, and Virginia Community College System Chancellor DuBois, signed an updated *Virginia Plan for Dual Enrollment Between Virginia Public Schools and Community Colleges*. Further, the recently published Virginia P-16 Council final report includes dual enrollment plans as one of its strategies for furthering the educational outcomes of high school and college students. Goal 4 reads, in part, "Increase the number of students completing rigorous courses in high school...Increase the proportion of students successfully completing AP, IB, or dual enrollment courses from 17 percent in 2005 to 25 percent in 2010." ¹⁵

The Commonwealth's focus on and support for dual enrollment programs has clearly had a positive effect on participation in such programs. Since 1992, the number of high school students enrolled in college dual enrollment courses has steadily risen, increasing 539.9%. By 2006, 20,582 more high school students were taking dual enrollment classes than in 1992. It should be noted that the numbers in the table below are somewhat higher due to some community colleges incorrectly reporting older students as high school dual enrolled. However, the effect of these errors is small and does not alter the trends or subsequent analysis.

High School Dual Enrollment Trends at Public Two- and Four-Year Institutions					
Year	Total				
1992	3,812				
1993	3,770				
1994	4,539				
1995	5,405				
1996	6,012				
1997	7,620				
1998	8,225				
1999	9,185				
2000	9,844				
2001	11,726				
2002	12,947				
2003	16,137				
2004	18,041				
2005	20,111				
2006	24,394				
% Change from 1992	539.9%				

Table 37: High School Dual Fall Headcount Enrollment Trends at Public Two and Four-Year Institutions from 1992 to 2006

High School Dual Enrollment Trends at Public Two- and Four-Year Institutions, Fall 1992 to Fall 2006

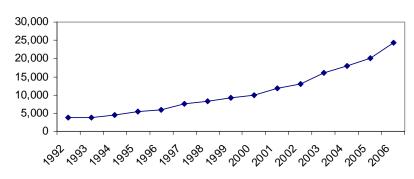


Figure 31: High School Dual Fall Headcount Enrollment Trends at Public Two and Four-Year Institutions from 1992 to 2006

Since 1992, nine of the 23 community colleges have seen very large percent increases in dual enrollment students: Germanna CC (5631%), John Tyler CC (5193%), Thomas Nelson CC (4381%), Lord Fairfax CC (2740%), Virginia Highlands CC (2610%), Northern Virginia CC (1441%), J. Sargeant Reynolds CC (1320%), Rappahannock CC (1237%), and Tidewater CC (1106%). In Fall 2006, J. Sargeant Reynolds CC enrolled the most dual enrolled high school students (2,514 students), followed by Virginia Western CC (2,153 students). Seven additional community colleges enrolled over 1,000 high school students: Southside Virginia CC (1,801 students), Lord Fairfax CC (1,619 students), Northern Virginia CC (1,618 students), Thomas Nelson CC (1,613 students), John Tyler CC (1,429 students), Rappahannock CC (1,350 students), and Central Virginia CC (1,104 students).

Nearly all of the dual enrollment courses are offered by the Virginia community college system. However, 1% to 2% of dual enrolled students are served by seven of the 15 public four-year institutions: Christopher Newport University, George Mason University, James Madison University, Longwood University, University of Mary Washington, University of Virginia Wise, and Virginia Commonwealth University. Richard Bland College has also experienced a large percent increase in the number of dual enrollment students (6775%), even though it serves a relatively small dual enrollment population (275 students in Fall 2006).

Institutions	Fall	Fall	Fall	Fall	Fall	Fall	Fall	Fall	%
	1992	1994	1996	1998	2000	2002	2004	2006	Change
Blue Ridge	312	164	185	194	160	205	309	300	-4%
Central Virginia	349	312	383	391	562	639	832	1,104	216%
Dabney S. Lancaster	125	110	145	240	284	301	298	363	190%
Danville	527	710	831	767	827	639	828	983	87%
Eastern Shore	26	32	71	87	90	120	156	145	458%
Germanna	13	195	474	613	646	730	747	745	5631%
J Sargeant Reynolds	177	177	247	567	794	931	1,840	2,514	1320%
John Tyler	27	56	46	299	423	629	835	1,429	5193%
Lord Fairfax	57	49	120	218	233	266	1,254	1,619	2740%
Mountain Empire	168	151	185	264	283	392	377	673	301%
New River	169	111	218	260	366	378	511	580	243%
Northern Virginia	105	138	207	352	341	284	833	1,618	1441%
Patrick Henry	85	12	44	360	372	448	623	596	601%
Paul D Camp	130	151	308	220	365	395	353	476	266%
Piedmont Virginia	81	97	131	201	227	451	721	836	932%
Rappahannock	101	138	195	99	178	1,092	1,133	1,350	1237%
Richard Bland College	4	17	35	157	230	245	207	275	6775%
Southside Virginia	591	829	560	958	800	1,235	1,230	1,801	205%
Southwest Virginia	68	53	84	141	183	309	363	534	685%
Thomas Nelson	36	44	40	139	87	117	713	1,613	4381%
Tidewater	81	210	252	211	344	307	653	977	1106%
Virginia Highlands	20	44	40	212	395	384	483	542	2610%
Virginia Western	287	369	601	819	1,073	1,601	1,861	2,153	650%
Wytheville	219	322	311	357	438	726	793	870	297%

Given the large upward trend of high school dual enrollment participation, future reports could examine the extent to which these students subsequently enroll in Virginia postsecondary institutions. Do they continue at the two- or four-year institution where they earned their dual enrollment credit or enter the postsecondary system at another institution? Are students who receive high school dual

enrollment credit more likely to remain in college and graduate with a bachelor's degree in a timely
manner? Further research on this population of students seems warranted.

VIRGINIA TRENDS IN FOCUS AREAS: STEM ENROLLMENT

The United States is considered the world leader in scientific and technological innovation. ¹⁶ Continued growth in student enrollment and degree attainment in Science, Technology, Engineering, and Mathematics (STEM) programs is vital if the United States is to maintain a competitive advantage. The Government Accountability Office (GAO) reports that in fiscal year 2004, federal agencies spent approximately \$2.8 billion to fund nearly 200 programs to increase the number of students in STEM fields, to increase the number of employees in STEM occupations, and to improve educational related programs. ¹⁷ The bulk of this funding went to programs providing financial support to students or providing infrastructure support to institutions. Yet, there is a general concern that the United States will have difficulty maintaining its global technological advantage as other nations have also enhanced their research investments, and large proportions of U.S secondary students fail to reach proficiency in math and science as measured by the National Assessment of Educational Progress (NAEP). ¹⁸

The National Science Foundation (NSF) reports that the United States ranks 20th among all nations in the proportion of 24-year-olds who have degrees in engineering or natural sciences. NSF collects data on the share of first university degrees awarded in STEM fields for several countries. The U.S. has one of the lowest rates of STEM to non-STEM degree production in the world. In 2002, 16.8% of first university degrees awarded in the United States were in STEM majors. Only Brazil at 15.5% had a smaller proportion of STEM degrees awarded. The nations with the highest percentage of first university degrees awarded in STEM fields were Japan (64.0%), China (52.1%), and South Korea (40.6%). It should be noted, however, that even though the United States ranks near the bottom in the percent of STEM degrees awarded, it ranks third in actual number of students receiving their first university degree in a STEM field. The percent of STEM field.

The 110th Congress in its current session is considering a number of legislative proposals to strengthen STEM education, research, and training at all levels of the educational pipeline. Many of these proposals are in response to a report issued by the National Academy of Sciences (NAS), entitled *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future*.²² The report proposes five recommendations: increase the supply of new STEM teachers, improve the skills of current STEM teachers, enlarge the pre-collegiate pipeline, increase postsecondary degree attainment, and enhance support for graduate and early-career research.

Virginia has also set an ambitious goal of increasing its research capacities by promoting research-based entrepreneurship and STEM attainment. Virginia is home to many technology companies located primarily in the northern corridor of the state. Given its close proximity to Washington, D.C, Virginia is perfectly located to take advantage of the many federal grants and opportunities available for technology programs. In its 2003 strategic plan, SCHEV identified as a priority the goal of strengthening Virginia's academic research capacities to improve the state's leadership position in a growing technologically-driven economy. The focus on strengthening Virginia's research capacity continues in SCHEV's 2007 strategic plan, *Advancing Virginia: Access, Alignment, Investment*. In the 2007 plan, goal 11, Enhance Research through Investment in Targeted Consortia, and goal 12, Enhance Research through Investment in Infrastructure, delineate strategies to keep moving scientific research endeavors forward. In the 2007 plan, goal 24

Virginia has a number of highly rated programs in science and engineering, but to compete with the top programs nationally the state must have the ability to attract graduate students and renowned faculty in these fields. ²⁵ According to the Digest of Education Statistics, 17% of bachelor's degrees

awarded in Virginia were in natural sciences, computer, and engineering fields. ²⁶ Five states had 20% of their total bachelor's degrees awarded in these fields: District of Columbia (20%), Georgia (20%), Maryland (20%), Montana (21%), and South Dakota (20%). At the master's level, 15% of the degrees awarded in Virginia were in natural sciences, computer, and engineering fields. States with the highest proportion of master's degrees in these areas include Colorado (19%), Maryland (19%), South Dakota (20%), and Wyoming (20%). ²⁷

While a great deal has been written about STEM enrollments, there has been no comprehensive review of enrollment numbers and characteristics of STEM majors in Virginia's public four- and two-year institutions. What follows is a first step towards illustrating where Virginia is in STEM enrollment and completions. These data then can be used as a springboard for further analysis and policy development.

Fall Headcount Enrollment:

At Virginia public institutions, STEM enrollment at the doctoral level increased by 41.3% over the last decade. Enrollment at the bachelor's level grew from 22,127 in 1995 to 25,040 in 2005, up 13.2%. STEM enrollment at the master's degree level fluctuated during the past decade. Total enrollment across program levels increased from 38,101 in 1995 to 42,245 in 2005, representing a 10.9% growth.

Enrollment in engineering bachelor's degree programs grew from 5,534 students in 1995 to 8,413 students in 2005, an increase of more than 50%. A similar trend has emerged for students enrolled in the biological sciences, with enrollment increasing from 6,584 in 1995 to 7,253 in 2005. Such trends are parallel to national STEM enrollments which have increased due to growth of students at the bachelor's and master's levels. In 2005, 44% of STEM doctoral student were enrolled in engineering programs. Engineering enrollment at the doctoral level moved from 1,115 in 1995 to 1,693 in 2005. Total enrollment in computer and informational sciences peaked in 2001, but between 2001 and 2005 there has been a steady decline of students at the associate's (56% decrease), bachelor's (44% decrease), and master's (19% decrease) degree level.

The table below presents undergraduate enrollment data for STEM majors at Virginia public four- and two-year institutions for academic years 1995, 2001, and 2005.

Enrollment in STEM Fields by Program Level at Virginia Public Four- and Two-Year Institutions: 1995, 2001 and 2005							
Program Area	Program Level	1995	2001	2005	% Change from 1995		
Agricultural Business	Associate's	601	691	713	18.6%		
	Bachelor's	76	91	808	963.2%		
	Master's	23	20	91	295.7%		
	Doctoral	20	0	49	145.0%		
	Total	720	802	1,661	130.7%		
Agricultural Services	Associate's	0	0	N/A*	N/A*		
	Bachelor's	788	739	N/A*	N/A*		
	Master's	82	101	N/A*	N/A*		
	Doctoral	43	38	N/A*	N/A*		
	Total	913	878	0	N/A*		

Biological Sciences	Enrollment in STEM Fields b	Enrollment in STEM Fields by Program Level at Virginia Public Four- and Two-Year Institutions: 1995, 2001 and 2005								
Bachelor's A85 A22 573 10.25 Master's A85 A22 573 18.15 Doctoral 770 731 1.022 32.75 Total 7,839 7,208 8,848 12.99 Computer and Information Sciences Associate's 1,006 1,827 799 -20.65 Master's 1,132 1,571 1,280 13.15 Doctoral 115 195 311 170.45 Total 5,325 9,345 5,633 5,88 Conservation and Renewable Associate's 87 51 44 -49.45 Bachelor's 1,330 780 607 5-4.45 Master's 108 157 215 99.15 Doctoral 93 90 96 3.25 Total 1,618 1,078 962 -40.59 Engineering Associate's 1,601 1,451 1,656 3.44 Master's 2,417 2,472 2,121 -12.25 Doctoral 1,115 1,190 51.8 Total 10,667 11,863 13,883 30,19 Engineering Related Technologies Associate's 3,967 3,702 4,233 6,73 Master's 0 0 0 0 Doctoral 4,938 4,484 5,133 3,99 Mathematics Associate's 3,967 3,702 4,233 6,73 Bachelor's 1,291 1,006 1,365 5,73 Master's 0 0 0 0 0 Total 4,938 4,484 5,133 3,99 Mathematics Associate's 3,967 3,702 4,233 6,73 Master's 278 395 216 22.35 Doctoral 1,115 1,100 1,365 5,73 Doctoral 1,171 1,100 1,100 Total 1,712 1,517 1,711 -0,19 Physical Sciences Associate's 1,115 1,104 1,092 2.15 Master's 2,481 1,957 2,451 1,25 Doctoral 44,849 3,768 4,402 0,88 Science Technologies Associate's 0 0 0 0 Doctoral 0 0 0	Program Area	Program Level	1995	2001	2005	% Change from 1995				
Master's 485 422 573 18.15 Doctoral 770 731 1,022 32.75 Total 7,839 7,208 8,848 12.99 Computer and Information Sciences Associate's 1,006 1,827 799 -20.65 Bachelor's 3,072 5,752 3,243 5.65 Master's 1,132 1,571 1,280 13.15 Doctoral 115 195 311 170.45 Total 5,325 9,345 5,633 5,88 Conservation and Renewable Associate's 87 51 44 44.4 Associate's 87 51 44 44.4 Bachelor's 1,330 780 607 54.45 Bachelor's 1,330 780 607 54.45 Bachelor's 1,4618 1,078 962 -40.59 Engineering Associate's 1,611 1,451 1,656 3.45 Bachelor's 5,534 6,750 8,413 52.05 Master's 2,417 2,472 2,121 12.25 Doctoral 1,115 1,190 1,693 51.85 Total 10,667 11,863 13,883 30.19 Engineering Related Technologies Associate's 3,967 3,702 4,233 6,75 Bachelor's 971 782 900 -7,33 Master's 0 0 0 0 Doctoral 0 0 0 0 Total 4,938 4,484 5,133 3,99 Mathematics Associate's 1,291 1,006 1,365 5,77 Master's 278 395 216 -22.35 Doctoral 1,115 1,194 1,092 -2.15 Bachelor's 3,255 297 278 14.55 Doctoral 1,171 1,517 1,711 -0.19 Physical Sciences Associate's 3,150 3,768 4,402 0.88 Science Technologies Associate's 0 0 0 0 Doctoral 448 410 581 29.75 Doctoral 448 410 581 29.75 Doctoral 448 410 581 29.75 Doctoral 4,869 3,768 4,402 0.88 Science Technologies Associate's 3,377 8,826 8,549 2.15 Bachelor's 0 0 0 0 0 Doctoral 0 0 0 12 1,006 Total Associate's 8,377 8,826 8,549 2.15 Bachelor's 22,127 23,912 25,040 13.25 Doctoral 0 0 0 0 0 Total Associate's 8,377 8,82	Biological Sciences	Associate's	0	0	0	0%				
Doctoral 770 731 1,022 32.75		Bachelor's	6,584	6,055	7,253	10.2%				
Total		Master's	485	422	573	18.1%				
Computer and Information Sciences Associate's Bachelor's 3,072 5,752 3,243 5,66		Doctoral	770	731	1,022	32.7%				
Bachelor's 3,072 5,752 3,243 5,66 Master's 1,132 1,571 1,280 13.11 Doctoral 115 195 311 170.45 Total 5,325 9,345 5,633 5.89 Conservation and Renewable Associate's 87 51 44 49.46 Bachelor's 1,330 780 607 54.45 Master's 108 157 215 99.15 Doctoral 93 90 96 3.25 Total 1,618 1,078 962 -40.59 Engineering Associate's 1,601 1,451 1,656 3.46 Bachelor's 5,534 6,750 8,413 52.07 Master's 2,417 2,472 2,121 -12.25 Doctoral 1,115 1,190 1,693 51.88 Total 10,667 11,863 13,883 30.19 Engineering Related Technologies Associate's 3,967 3,702 4,233 6.76 Bachelor's 971 782 900 -7.38 Master's 971 782 900 -7.38 Master's 971 782 900 -7.38 Master's 1,291 1,006 1,365 5.78 Master's 2,783 395 216 -22.38 Master's 278 395 216 -22.38 Doctoral 143 116 130 -9.15 Total 1,712 1,517 1,711 -0.19 Physical Sciences Associate's 3,25 297 278 -1.45 Master's 325 297 278 -1.45 Doctoral 448 410 581 29.78 Total 4,369 3,768 4,402 0.88 Science Technologies Associate's 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Total	7,839	7,208	8,848	12.9%				
Master's 1,132 1,571 1,280 13.15 170.44 1581 170.44 170.44 170.45 170.46 170.4	Computer and Information Sciences	Associate's	1,006	1,827	799	-20.6%				
Doctoral Total 5,325 9,345 5,633 5,88		Bachelor's	3,072	5,752	3,243	5.6%				
Total		Master's	1,132	1,571	1,280	13.1%				
Associate's 87 51 44 -49,45		Doctoral	115	195	311	170.4%				
Bachelor's 1,330 780 607 54.45 Master's 108 157 215 99,15 Doctoral 93 90 96 3.25 Total 1,618 1,078 962 -40.55 Engineering Associate's 1,601 1,451 1,656 3.45 Bachelor's 5,534 6,750 8,413 52.05 Master's 2,417 2,472 2,121 -12.25 Doctoral 1,115 1,190 1,693 51.85 Total 10,667 11,863 13,883 30.19 Engineering Related Technologies Associate's 3,967 3,702 4,233 6.75 Bachelor's 971 782 900 -7,33 Master's 0 0 0 0 0 Doctoral 4,938 4,484 5,133 3.99 Mathematics Associate's 0 0 0 0 Total 4,938 4,484 5,133 3.99 Mathematics Associate's 0 0 0 0 Bachelor's 1,291 1,006 1,365 5.75 Master's 278 395 216 -22.35 Doctoral 143 116 130 -9,15 Total 1,712 1,517 1,711 -0.19 Physical Sciences Associate's 2,481 1,957 2,451 -1.25 Master's 325 297 278 -1.45 Doctoral 448 410 581 29.75 Doctoral 448 410 581 29.75 Total 4,369 3,768 4,402 0.88 Science Technologies Associate's 0 0 0 0 Master's 0 0 0 0 0 Doctoral 0 0 0 12 51009 Doctoral 0 0 0 0 0 Doctoral 0		Total	5,325	9,345	5,633	5.8%				
Master's 108 157 215 99.15 Doctoral 93 90 96 3.25	Conservation and Renewable	Associate's	87	51	44	-49.4%				
Doctoral 70tal 7		Bachelor's	1,330	780	607	-54.4%				
Total		Master's	108	157	215	99.1%				
Engineering		Doctoral	93	90	96	3.2%				
Bachelor's 5,534 6,750 8,413 52.05 Master's 2,417 2,472 2,121 -12.25 Doctoral 1,115 1,190 1,693 51.86 Total 10,667 11,863 13,883 30.19 Engineering Related Technologies Associate's 3,967 3,702 4,233 6,75 Bachelor's 971 782 900 -7,33 Master's 0 0 0 0 0 Doctoral 0 0 0 0 0 Total 4,938 4,484 5,133 3,99 Mathematics Associate's 0 0 0 0 Bachelor's 1,291 1,006 1,365 5,75 Master's 278 395 216 -22,35 Doctoral 143 116 130 -9,15 Total 1,712 1,517 1,711 -0,19 Physical Sciences Associate's 1,115 1,104 1,092 -2,15 Bachelor's 2,481 1,957 2,451 -1,25 Master's 325 297 278 -14,55 Doctoral 448 410 581 29,75 Total 4,369 3,768 4,402 0,89 Science Technologies Associate's 0 0 0 0 Master's 0 0 0 0 0 Doctoral 0 0 0 0 Total 0 0 12 >1009 Total Associate's 8,377 8,826 8,549 2,116 Bachelor's 22,127 23,912 25,040 13,25 Master's 4,850 5,435 4,774 -1,65		Total	1,618	1,078	962	-40.5%				
Master's 2,417 2,472 2,121 -12.25 Doctoral 1,115 1,190 1,693 51.85 Total 10,667 11,863 13,883 30.19 Engineering Related Technologies Associate's 3,967 3,702 4,233 6,75 Bachelor's 971 782 900 -7.35 Master's 0 0 0 0 0 Total 4,938 4,484 5,133 3.99 Mathematics Associate's 0 0 0 0 Bachelor's 1,291 1,006 1,365 5.75 Master's 278 395 216 -22.35 Doctoral 143 116 130 -9.15 Total 1,712 1,517 1,711 -0.19 Physical Sciences Associate's 1,115 1,104 1,092 -2.15 Bachelor's 2,481 1,957 2,451 -1.25 Master's 325 297 278 -14.55 Doctoral 448 410 581 29.75 Total 4,369 3,768 4,402 0.89 Science Technologies Associate's 0 0 0 0 Master's 0 0 0 0 0 Doctoral 0 0 0 0 Total 0 0 12 >1005 Total Associate's 8,377 8,826 8,549 2.15 Bachelor's 22,127 23,912 25,040 13.25 Master's 4,850 5,435 4,774 -1.65	Engineering	Associate's	1,601	1,451	1,656	3.4%				
Master's 2,417 2,472 2,121 -12.25 Doctoral 1,115 1,190 1,693 51.85 Total 10,667 11,863 13,883 30.19 Engineering Related Technologies Associate's 3,967 3,702 4,233 6,75 Bachelor's 971 782 900 -7.35 Master's 0 0 0 0 0 Total 4,938 4,484 5,133 3.99 Mathematics Associate's 0 0 0 0 Bachelor's 1,291 1,006 1,365 5.75 Master's 278 395 216 -22.35 Doctoral 143 116 130 -9.15 Total 1,712 1,517 1,711 -0.19 Physical Sciences Associate's 1,115 1,104 1,092 -2.15 Bachelor's 2,481 1,957 2,451 -1.25 Master's 325 297 278 -14.55 Doctoral 448 410 581 29.75 Total 4,369 3,768 4,402 0.89 Science Technologies Associate's 0 0 0 0 Master's 0 0 0 0 0 Doctoral 0 0 0 0 Total 0 0 12 >1005 Total Associate's 8,377 8,826 8,549 2.15 Bachelor's 22,127 23,912 25,040 13.25 Master's 4,850 5,435 4,774 -1.65		Bachelor's	5,534	6,750	8,413	52.0%				
Total		Master's	2,417	2,472		-12.2%				
Engineering Related Technologies		Doctoral	1,115	1,190	1,693	51.8%				
Bachelor's 971 782 900 -7.33 Master's 0 0 0 0 0 Total 4,938 4,484 5,133 3,99 Mathematics Associate's 0 0 0 0 Bachelor's 1,291 1,006 1,365 5.75 Master's 278 395 216 -22.33 Doctoral 143 116 130 -9.15 Total 1,712 1,517 1,711 -0.19 Physical Sciences Associate's 1,115 1,104 1,092 -2.15 Bachelor's 2,481 1,957 2,451 -1.25 Master's 325 297 278 -14.55 Doctoral 448 410 581 29.75 Total 4,369 3,768 4,402 0.89 Science Technologies Associate's 0 0 12 >1005 Master's 0 0 0 0 Master's 0 0 0 0 Doctoral 0 0 0 0 Total 0 0 12 >1009 Total Associate's 8,377 8,826 8,549 2.15 Bachelor's 22,127 23,912 25,040 13.25 Master's 4,850 5,435 4,774 -1.65		Total	10,667	11,863	13,883	30.1%				
Master's	Engineering Related Technologies	Associate's	3,967	3,702	4,233	6.7%				
Doctoral Doctoral Doctoral Doctoral A,938 A,484 5,133 A,99		Bachelor's	971	782	900	-7.3%				
Mathematics Associate's Bachelor's Associate's Bachelor's B		Master's	0	0	0	0%				
Mathematics Associate's Bachelor's 1,291 1,006 1,365 5.76 5.76 Master's 278 395 216 22.33 278 278 278 278 278 278 278 278 278 278		Doctoral	0	0	0	0%				
Bachelor's 1,291 1,006 1,365 5.76 Master's 278 395 216 -22.33 Doctoral 143 116 130 -9.15 Total 1,712 1,517 1,711 -0.19 Physical Sciences Associate's 1,115 1,104 1,092 -2.15 Bachelor's 2,481 1,957 2,451 -1.25 Master's 325 297 278 -14.55 Doctoral 448 410 581 29.75 Doctoral 4,369 3,768 4,402 0.89 Science Technologies Associate's 0 0 12 >1005 Bachelor's 0 0 0 0 0 Master's 0 0 0 0 0 Total 0 0 12 >1009 Total 3,377 8,826 8,549 2.19 Bachelor's 22,127 23,912 25,040 13.26 Master's 4,850 5,435 4,774 -1.65		Total	4,938	4,484	5,133	3.9%				
Master's 278 395 216 -22.33 Doctoral 143 116 130 -9.15 Total 1,712 1,517 1,711 -0.19 Physical Sciences Associate's 1,115 1,104 1,092 -2.15 Bachelor's 2,481 1,957 2,451 -1.25 Master's 325 297 278 -14.55 Doctoral 448 410 581 29.75 Total 4,369 3,768 4,402 0.89 Science Technologies Associate's 0 0 12 >1005 Bachelor's 0 0 0 0 0 Master's 0 0 0 0 0 Doctoral 0 0 0 0 Total 0 0 12 >1009 Total Associate's 8,377 8,826 8,549 2.15 Bachelor's 22,127 23,912 25,040 13.25 Master's 4,850 5,435 4,774 -1.65	Mathematics	Associate's	0	0	0	0%				
Doctoral 143 116 130 -9.19		Bachelor's	1,291	1,006	1,365	5.7%				
Physical Sciences		Master's	278	395	216	-22.3%				
Physical Sciences Associate's Bachelor's Bachelo		Doctoral	143	116	130	-9.1%				
Bachelor's 2,481 1,957 2,451 -1.25 Master's 325 297 278 -14.55 Doctoral 448 410 581 29.75 Total 4,369 3,768 4,402 0.89 Science Technologies Associate's 0 0 12 >1005 Bachelor's 0 0 0 0 0 Master's 0 0 0 0 0 Doctoral 0 0 0 0 Total 0 0 12 >1009 Total Associate's 8,377 8,826 8,549 2.15 Bachelor's 22,127 23,912 25,040 13.25 Master's 4,850 5,435 4,774 -1.65		Total	1,712	1,517	1,711	-0.1%				
Master's 325 297 278 -14.55 Doctoral 448 410 581 29.75 Total 4,369 3,768 4,402 0.89 Science Technologies Associate's 0 0 12 >1005 Bachelor's 0 0 0 0 0 Master's 0 0 0 0 0 Doctoral 0 0 0 0 Total 0 0 12 >1005 Total 3,377 3,826 8,549 2.15 Bachelor's 22,127 23,912 25,040 13.25 Master's 4,850 5,435 4,774 -1.65	Physical Sciences	Associate's	1,115	1,104	1,092	-2.1%				
Doctoral 448 410 581 29.75 Total 4,369 3,768 4,402 0.88 Science Technologies Associate's 0 0 12 >1005 Bachelor's 0 0 0 0 Master's 0 0 0 0 Doctoral 0 0 0 0 Total 0 0 12 >1005 Total 8,377 8,826 8,549 2.15 Bachelor's 22,127 23,912 25,040 13.25 Master's 4,850 5,435 4,774 -1.65		Bachelor's	2,481	1,957	2,451	-1.2%				
Total 4,369 3,768 4,402 0.89 Science Technologies Associate's 0 0 12 >100 9 Bachelor's 0 <td></td> <td>Master's</td> <td>325</td> <td>297</td> <td>278</td> <td>-14.5%</td>		Master's	325	297	278	-14.5%				
Science Technologies Associate's Bachelor's Bach		Doctoral	448	410	581	29.7%				
Bachelor's 0 0 0 0 09 09 09 09 09 09 09 09 09 09 0		Total	4,369	3,768	4,402	0.8%				
Master's Doctoral 0	Science Technologies	Associate's	0	0	12	>100%				
Doctoral 0 0 0 0 0 0 0 0 0 12 >1009 0 1009 0 1009 0 0 1009 0 0 0 0 0 0 1009 0 <td></td> <td>Bachelor's</td> <td>0</td> <td>0</td> <td>0</td> <td>0%</td>		Bachelor's	0	0	0	0%				
Total 0 0 12 >1009 Total Associate's Bachelor's Bachelor's Associate's Bachelor's Associate's Bachelor's Associate's Associate's Bachelor's Associate's Associate's Associate's Associate's Associate's Bachelor's Associate's		Master's	0	0	0	0%				
Total Associate's 8,377 8,826 8,549 2.15 Bachelor's 22,127 23,912 25,040 13.25 Master's 4,850 5,435 4,774 -1.65		Doctoral	0	0	0	0%				
Bachelor's 22,127 23,912 25,040 13.25 Master's 4,850 5,435 4,774 -1.65		Total	0	0	12	>100%				
Master's 4,850 5,435 4,774 -1.69	Total	Associate's	8,377	8,826	8,549	2.1%				
		Bachelor's	22,127	23,912	25,040	13.2%				
Doctoral 2.747 2.770 3.882 41.39		Master's	4,850	5,435	4,774	-1.6%				
Doctoral 2,141 2,110 3,002 41.3		Doctoral	2,747	2,770	3,882	41.3%				
Total 38,101 40,943 42,245 10.99 *Due to CIP2000 changes Agricultural Services programs were subsumed under Agricultural Business and Biological						10.9%				

^{*}Due to CIP2000 changes Agricultural Services programs were subsumed under Agricultural Business and Biological Sciences
Table 39: Enrollment in Stem Fields by Program Level at Virginia Public Four- and Two-Year Institutions, 1995, 2001 and 2005

STEM Enrollment by Program Level and Gender:

Disparities in gender enrollment, particularly in the STEM fields, have received considerable attention in recent years. Several institutions and organizations have sponsored programs to improve the science and education participation of young women.²⁹ Overall, women's enrollment has increased in some program areas during the last decade. In the biological sciences, the number of women grew at every degree level: bachelor's (23.6%), master's (43.1%), and doctor's (47.7%). However, the number of men enrolled in biological sciences at the bachelor's and master's level declined by 8.4% and 7.5% respectively. Computer and information sciences has exhibited a large drop in the number of women enrolled at the bachelor's level, down 30.1%. Enrollment has also decreased at the master's level, though not quite as strongly. However, the number of men enrolled in computer and information sciences has continued to increase at every level except at the associate's level. Enrollment in engineering has increased for men and women at all levels except for the master's degree level.

The following table shows undergraduate enrollment data for STEM majors by gender at Virginia public four- and two-year institutions for academic years 1995 and 2005.

STEM Enrollment by Program Level and Gender at Virginia Public Four- and Two-Year Institutions: 1995 and 2005									
		1	995	20	005				
Program Area	Program Level	Men	Women	Men	Women	% Change in Men from 1995	% Change in Women from 1995		
Agricultural Business	Associate's	275	326	301	412	9.5%	26.4%		
	Bachelor's	50	26	317	491	534.0%	1788.5%		
	Master's	10	13	42	49	320.0%	276.9%		
	Doctoral	15	5	25	24	66.7%	380.0%		
	Total	350	370	685	976	95.7%	163.8%		
Agricultural Services	Associate's	0	0	0	0	0	0		
	Bachelor's	338	450	N/A*	N/A*	N/A*	N/A*		
	Master's	39	43	N/A*	N/A*	N/A*	N/A*		
	Doctoral	28	15	N/A*	N/A*	N/A*	N/A*		
	Total	405	508	N/A*	N/A*	N/A*	N/A*		
Biological Sciences	Associate's	0	0	0	0	0	0		
	Bachelor's	2,774	3,810	2,542	4,711	-8.4%	23.6%		
	Master's	239	246	221	352	-7.5%	43.1%		
	Doctoral	420	350	505	517	20.2%	47.7%		
	Total	3,433	4,406	3,268	5,580	-4.8%	26.6%		
Computer and Information Sciences	Associate's	691	315	592	207	-14.3%	34.2%		
	Bachelor's	2,361	711	2,746	497	16.3%	-30.1%		
	Master's	797	335	972	308	22.0%	-8.1%		
	Doctoral	86	29	239	72	177.9%	148.3%		
	Total	3,935	1,390	4,549	1,084	15.6%	-22.0%		
Conservation and Renewable	Associate's	71	16	39	5	-45.1%	-68.8%		
	Bachelor's	804	526	352	255	-56.2%	-51.5%		
	Master's	69	39	104	111	50.7%	184.6%		
	Doctoral	62	31	62	34	0.0%	9.7%		
	Total	1,006	612	557	405	-44.6%	-33.8%		

STEM Enrollment by Prog	ram Level and (Gender at 1995 and		olic Four-	and Two-Ye	ear Instituti	ons:
		1	995	20	005		
Program Area	Program Level	Men	Women	Men	Women	% Change in Men from 1995	% Change in Women from 1995
Engineering	Associate's	1,382	219	1,414	242	2.3%	10.5%
	Bachelor's	4,614	920	6,886	1,527	49.2%	66.0%
	Master's	1,941	476	1,664	457	-14.3%	-4.0%
	Doctoral	943	172	1,342	351	42.3%	104.1%
	Total	8,880	1,787	11,306	2,577	27.3%	44.2%
Engineering Related Technologies	Associate's	3,467	500	3515	718	1.4%	43.6%
	Bachelor's	876	95	788	112	-10.0%	17.9%
	Master's	0	0	0	0	0.0%	0.0%
	Doctoral	0	0	0	0	0.0%	0.0%
	Total	4,343	595	4,303	830	-0.9%	39.5%
Mathematics	Associate's	0	0	0	0	0	0
	Bachelor's	647	644	696	669	7.6%	3.9%
	Master's	160	118	118	98	-26.3%	-16.9%
	Doctoral	100	43	80	50	-20.0%	16.3%
	Total	907	805	894	817	-1.4%	1.5%
Physical Sciences	Associate's	444	671	380	712	-14.4%	6.1%
	Bachelor's	1,446	1,035	1,383	1,068	-4.4%	3.2%
	Master's	222	103	171	107	-23.0%	3.9%
	Doctoral	332	116	401	180	20.8%	55.2%
	Total	2,444	1,925	2,335	2,067	-4.5%	7.4%
Science Technologies	Associate's	0	0	6	6	>100%	>100%
	Bachelor's	0	0	0	0	0.0%	0.0%
	Master's	0	0	0	0	0.0%	0.0%
	Doctoral	0	0	0	0	0.0%	0.0%
	Total	0	0	6	6	>100%	>100%
Total	Associate's	6,330	2,047	6,247	2,302	-1.3%	12.5%
	Bachelor's	13,910	8,217	15,710	9,330	12.9%	13.5%
	Master's	3,477	1,373	3,292	1,482	-5.3%	7.9%
	Doctoral	1,986	761	2,654	1,228	33.6%	61.4%
	Total	25,703	12,398	27,903	14,342	8.6%	15.7%

Table 40: STEM Enrollment by Program Level and Gender at Virginia Public Four- and Two-Year Institutions, 1995 and 2005

STEM Enrollment by Program Level and Foreign/International Students:

According to the NSF survey of earned doctorates, foreign students earned one-third of all doctoral degrees awarded in STEM fields in 2003. There is some concern in the scientific community about the increased participation of foreign students in graduate science and engineering programs given that U.S citizen enrollment in these programs has not kept pace. However, the GAO found that while STEM enrollments of foreign students increased by 57% from 1995-1996 to 2003-2004, most of this growth occurred at the bachelor's level. At Virginia's public four-year institutions, enrollment of foreign/international students increased at all program levels from 1995 to 2005.

The table below displays the enrollment totals of foreign/international students across the bachelor's, master's, and doctoral level for years 1995 and 2005.

Foreign/International Students Enrolled in STEM Programs by Program Level at Virginia Public Four-Year Institutions from 1995 to 2005						
Program level	1995	2005	% change from 1995			
Bachelor's	103	244	136.8%			
Master's	277	582	110.1%			
Doctoral	157	220	40.1%			
Total	537	1,046	94.7%			

Table 41: Foreign/International Students Enrolled in STEM Programs by Program Level at Virginia Public Four Institutions, 1995-96 and 2005-06

STEM Completions:

In the last decade, minority degree attainment in STEM majors has grown steadily. At the associate's level, minority degree attainment grew over 50% for Black, non-Hispanic and Hispanics. Asian/Pacific Islander saw a slight increase of 1.5% in associate's degree attainment during the last 10 years. Degree awards at the bachelor's level for Black, non- Hispanic students increased from 374 to 501, representing a 34% increase. Likewise, Black, non- Hispanic students' master's degree attainment grew by nearly two-thirds from 49 students in 1995-96 to 80 in 2005-06. Doctoral degree attainment in STEM degrees remained steady for Black, non-Hispanic students during the same time period.

Hispanic degree attainment in STEM majors has increased sharply in the last decade. At the bachelor's level Hispanic students earned a total of 63 degrees in 1995-96. By 2005-06 that figure grew to 131, an increase of 107.9%. Degree attainment in STEM at the master's degree level increased close to 50% growing from 20 master's degrees in 1995-96 to 29 degrees in 2005-06.

Among Asian/Pacific Islander students, STEM degree attainment had a smaller growth rate at the bachelor's and master's level. In 1995-96, Asian/Pacific Islander students earned 506 bachelor's degrees; by 2005-06 that figure increased to 620. Similarly, master's degree attainment went from 143 in 1995-96 to 166 in 2005-06. Doctoral degree attainment grew by 23.5% over the past decade.

From 1995-96 to 2005-06, American Indian/Native American STEM degree attainment at the bachelor's level decreased by 26.7%. However, STEM degree attainment at the master's level increased. By 2005-06, six American Indian/Native American students earned a master's degree in a STEM field. The doctoral degree attainment in STEM programs remained the same.

The table below displays the number of minority graduates in STEM fields across all degree levels since 1995.

Completions in STEM Programs by Minority Students and Degree Level At Virginia Public Four- and Two-Year Institutions: 1995-96 and 2005-06							
Ethnicity/Change	Degree Level	1995-96	2005-06	% Change from 1995-96			
Black, Non Hispanic	Associate's	79	146	84.8%			
	Bachelor's	374	501	34.0%			
	Master's	49	80	63.3%			
	Doctoral	11	11	0.0%			
	Total	513	738	43.9%			
Hispanic	Associate's	14	24	71.4%			
	Bachelor's	63	131	107.9%			
	Master's	20	29	45.0%			
	Doctoral	4	5	25.0%			
	Total	101	189	87.1%			
Asian/Pacific Islander	Associate's	65	66	1.5%			
	Bachelor's	506	620	22.5%			
	Master's	143	166	16.1%			
	Doctoral	17	21	23.5%			
	Total	731	873	19.4%			
American Indian/Native American	Associate's	8	8	0.0%			
	Bachelor's	15	11	-26.7%			
	Master's	0	6	>100.0%			
	Doctoral	2	2	0.0%			
	Total	25	27	8.0%			
Total Minority	Associate's	166	244	47.0%			
	Bachelor's	958	1,263	31.8%			
	Master's	212	281	32.5%			
	Doctoral	34	39	14.7%			
	Total	1,370	1,827	33.4%			

Table 42: Completions in STEM Programs by Minority Students and Degree Level at Virginia Public Four- and Two-Year Institutions, 1995-96 and 2005-06

Future Directions:

Virginia enrollment and degree attainment in STEM fields are increasing. However there are noteworthy downward trends in certain areas. For example, enrollment of women in engineering and computer information sciences declined at the master's degree level, though it increased at the bachelor's and doctoral degree level. Future analysis could focus on whether women are enrolling in doctoral programs first versus pursuing a terminal master's degree.

Minority enrollment in STEM fields has climbed steadily since 1995. In the past decade, STEM degree attainment by Black, non-Hispanic, Hispanic, and Asian/Pacific Islanders students at the bachelor's degree level showed notable increases. Future reports could explore the intersection of race and gender, examining degree attainment of minority men and women. The issue of STEM persistence and retention rates can also be examined to determine whether a significant number of students who enroll in STEM fields ultimately obtain a degree in their selected area.

There are several additional issues to explore in future reports. Some of these include: examining degree attainment among foreign/international students in the STEM fields, determining the percentage

of STEM and non-STEM degrees awarded in the state, gathering information on the number of STEM employers in the state, and ultimately determining how many of Virginia's STEM graduates are employed in the state.

CONCLUSION

Since 1987, the Commonwealth has seen an increase of 83,014 students in the fall enrollments of its 15 public four-year institutions, Richard Bland College, and the 23 colleges of the Virginia Community College System. Of these, 46,431 students were in the four-year sector (32,419 of which were undergraduates), while the remaining 36,583 were in two-year colleges. After a few years of rising enrollments, the years 1992-1995 were relatively flat, with a minor dip in 1994 in both the public four-year and two-year sectors. However, since 1997, enrollment has increased steadily at Virginia's higher education institutions.

Data show that total undergraduate fall headcount enrollment increased about 29% or by 69,002 students from 1987 to 2006. During that same time period, in-state undergraduate enrollment grew at a faster rate than out-of-state undergraduate enrollment, 30% (62,222 students) and 22% (6,780 students) respectively. During the last 20 years, the percentage of resident undergraduate students at Virginia's public institutions has remained relatively constant at about 85%.

At public four-year institutions, undergraduate fall headcount enrollment increased by 28% from 1987 to 2006. In-state undergraduate enrollment grew faster than undergraduate out-of-state enrollment, 30.7% and 18.8% respectively. In-state undergraduate enrollment growth can largely be attributed to four institutions: George Mason University, James Madison University, Old Dominion University, and Virginia Commonwealth University. Out-of-state undergraduate enrollment increased at a much slower rate than out-of-state graduate (52.8%) and first professional (69%) enrollment between 1987 and 2006. Both graduate and first professional out-of-state enrollment increased more than in-state graduate and first professional enrollment over the last 20 years. In fact, in-state first professional enrollment decreased by 2.3% during that time period. Additionally, data indicate that in-state graduate and first professional enrollment now make up less of the total graduate and first professional population than it did in 1987. In 2006, in-state graduate enrollment constituted 72% of the total graduate enrollment (down 2% since 1987). The proportion of in-state first professional enrollment was 60% in 2006, down 12% since 1987.

Over the last 20 years, undergraduate enrollment trends at public two-year institutions mirror most of the trends at public four-year institutions. Total undergraduate enrollment at the public two-years grew close to 30% overall, with in-state undergraduate enrollment increasing 29.2%. One trend not consistent with the public four-year sector is that the public two-year sector's out-of-state enrollment increased slightly faster than in-state enrollment from 1987 to 2006. Even with these increases in out-of-state enrollments, the percentage of out-of-state students at the two-year institutions remains less than 6%.

Total new freshmen fall headcount enrollment at the public institutions grew by 57% or by 19,938 students from 1992 to 2006. During this period, in-state new freshmen enrollment increased by 61% or by 17,337 students, while out-of-state new freshmen grew by 41% or by 2,601 students. Over the last 15 years, in-state new freshmen have made up the majority of the new freshmen population at public four-year and two-year institutions, 77% and 92% respectively.

Data indicate that the number of new undergraduate transfers within Virginia's public higher education system remained flat between 1992 and 2006. During the last 15 years, proportionally two-thirds of the two-year transfer students were non-associate's degree transfer students. However, the number of students transferring with associate's degrees to the public four-year sector has increased at faster rate than that of the non-associate's degree transfer during that same time period. This increase in

associate's degree transfers is particularly evident during the years 2002 to 2006 where associate's degree students transferring into public four-year institutions increased by 27%, compared to 2% by non-associate's degree transfer.

In looking at demographic data, there are several interesting trends, some of which mirror national changes. For example, Virginia's undergraduate students are becoming more diverse as the proportion of minority enrollment now represents 29% of the undergraduate population. This statistic is up 4% from 1996. Hispanic student enrollments grew at a rate of 97%, the largest growth among all the ethnic groups from 1996 to 2006. Another interesting trend involves the enrollment of Foreign/International students. While the proportion of Foreign/International undergraduate enrollment remained relatively constant over the last 10 years, Foreign/International undergraduate enrollment decreased by 6% between 2001 and 2006. This decrease could be due to federal changes in visa requirements after the events of September 11, 2001. Women still continue to make up a majority of the undergraduate population at 57% (up 1% from 1996). Traditional-aged students are also more predominant than non-traditional-aged students, as the proportion of students age 24 and under now accounts for 88% of undergraduate enrollment at the public four-year (up 6% from 1996) and 61% at the two-year institutions (up 15% from 1996). These demographic changes, along with the growing number and proportion of full-time students statewide, show that Virginia's undergraduate population reflects national trends. Lastly, report findings indicate that undergraduate students from the Hampton Roads and Northern Virginia region still constitute the largest proportion of undergraduate students at public institutions, close to 50%.

Also noteworthy are the changes occurring at Christopher Newport University and Norfolk State University. Over the last 20 years, Christopher Newport University's student body has become less diverse and more traditional, reflecting a change in the institution's mission. Since 1996, key changes in Christopher Newport University's undergraduate population include: a decrease in the number of minorities (down 10% to 13% total minorities); a decrease in the number of women (down 6% to 54% women); an increase in the number of traditional-aged students (up 35% to 95% age 24 and under); an increase in the number of students living on campus (up 51% to 60% on campus); and an increase in the number of full-time students (up 28% to 94% full-time). Furthermore, Christopher Newport University's enrollment of new undergraduate transfers decreased by 85.5% (or 763 students) between 1992 and 2006. Just as Christopher Newport University is re-shaping its undergraduate population, the institution has also focused on building a graduate population. Christopher Newport University began offering graduate programs in 1991, and since that time, the university's graduate enrollment has increased by 314.6% (or 129 students). In the coming years an analysis could be conducted to determine how much further Christopher Newport University will shift its student population away from a commuter, non-traditional student body to a more on-campus, full-time, traditional one.

Norfolk State University enrollment trends tell a very different story. Over the past 20 years, total FTE enrollment and fall headcount enrollment have declined. Specifically from 1987 to 2006, the institution's fall headcount enrollment of in-state undergraduates decreased by 14.5%, the number of out-of-state undergraduates decreased by 43.6%, and the number of in-state graduate students decreased by 3.1%. The growth of out-of-state graduate students by 346.2% has not been enough to offset Norfolk State University's steady decline in total enrollment during that time period. Although the number of undergraduate students living on campus has increased at a faster rate than undergraduate students living off campus and traditional-aged undergraduate students are more predominant than non-traditional-aged undergraduate students, the institution's enrollment of full-time undergraduates decreased by 29.3% from 1996 to 2006. A further in-depth analysis of Norfolk State University's declining enrollments may shed some light, not only on Virginia's higher education system, but also on HBCU institutions in other states that may be experiencing similar trends.

The two focus areas examined in this report — dual enrollment and STEM majors — raise interesting questions for further research. Because high school dual enrollment programs are often viewed as beneficial and increasing numbers of high school students participate in these programs, continued analysis of this population seems warranted. Additionally, the second focus area, increasing the number of students who major in STEM areas, is at the forefront of national educational debates. These majors are seen as critical to the future economic development of Virginia. Over the last decade, Virginia enrollment in STEM program areas has increased by 11%, but there are noteworthy downward trends in specific areas. Continued in-depth analysis of STEM majors and characteristics may provide useful information to inform policy.

What data should be examined and what questions must be asked to assist policymakers in addressing important issues facing Virginia higher education? First, enrollment has been steadily increasing at both the public four-year and two-year sectors in Virginia's higher education system. If enrollment continues to grow at a steady pace, will institutions be able to continue managing total enrollment demand? Or will the demand taper off as the current peak of graduating high school seniors begins to diminish? This question may be answered when the 2007 enrollment projections are presented to Council and when SCHEV finishes their annual review of institutional plans and targets.

Secondly, growth of out-of-state undergraduate and new freshmen enrollment is not as significant as might be expected. In fact, the proportion of out-of-state undergraduates and new freshmen enrolled at public four-year institutions has declined over the last 20 years. In contrast, there has been a notable shift in the graduate and first professional enrollment populations, where out-of-state graduate and first professional students have gained ground. Based on individual institutions' 2005 enrollment projections, the shift away from in-state to out-of-state graduate and first professional students may be a result of institutional policies. Additional contributing factors could be Virginia's healthy economy as more Virginia residents are seeking employment opportunities instead of applying to graduate and first professional school. Furthermore, many graduate and first professional programs at Virginia institutions may be gaining a national reputation and thereby attracting increasingly greater numbers of out-of-state students. A closer look at why the system seems to be enrolling fewer in-state students at these levels may be warranted.

Finally, what will be the implications of public four-year institutions taking more associate's degree transfers? This recent trend gained momentum in the last five years and will continue to grow as the institutions attempt to meet the Restructuring Act requirement to make more transfer opportunities available. In fact, articulation agreements being instituted between public four-year and two-year institutions not only target associate's degree transfers, but also establish dual enrollment programs between institutions. These programs allow students to major in a program at a two-year institution that corresponds to a program at a four-year institution. This type of agreement could assist the two-year institutions in more closely aligning their courses of study to that of the four-year institutions, which in turn could help transfer students complete their education programs more efficiently. In addition, with the 2007 General Assembly passing the Two-Year Transfer Grant program (applicable to associate's degree graduates who want to transfer to a four-year institution and who meet the merit and financial need requirements), there could be a greater financial incentive for students to enroll in the associate's degree track at community colleges and Richard Bland College. Again, only time will tell if these latest changes in transfer and financial aid policy will have any effect on enrollment patterns at Virginia's college and universities.

Ultimately, this report may raise more questions than it answers, yet it should help policymakers as they analyze the results of recent policy decisions, such as additional requirements in the area of

related to Virginia's system of higher education.	

ENDNOTES

¹ Synder, T.D., Tan A.G., and Hoffman, C.M. (2006). Digest of Education Statistics 2005 (NCES 2006-030), U.S. Department of Education, National Center for Education Statistics, Washington D.C.: U.S. Government Printing Office, August 2006, Table 171.

² Ibid, Table 171.

³ Ibid, Table 185, Table 171, Table 175.

⁴ Ibid, Table 186.

⁵ Ibid. Table 187.

⁶ Ibid, Table 179.

⁷ Ibid, Table 179.

⁸ Ibid, Table 177, Table 185, Table 186, Table 187.

⁹ Ibid, Table 177.

¹⁰ Ibid, Table 206.

¹¹ Ibid, Table 177.

¹² Ibid, Table 206.

¹³ Kleiner, Brian and Lewis, Laurie. "Dual Enrollment of High School Students at Postsecondary Institutions: 2002-03," Education Statistics Quarterly, volume 7, issues 1&2, Topic: Elementary and Secondary Education, 2006, p. 1.

¹⁴ Virgnia Plan for Dual Enrollment Between Virginia Public Schools and Community Colleges, 2005, Attachment A to Supts Memo Informational No. 073

¹⁵ Report to the Governor and General Assembly, Virginia's P-16 Education Council, October 2006, p.22.

¹⁶ Government Accountability Office (GAO), *Higher Education: Federal Science, Technology, Engineering, and Mathematics Programs and Related Trends*, GAO-06-114, Washington D.C., October 12, 2005.

¹⁷ Government Accountability Office (GAO), *Higher Education: Federal Science, Technology, Engineering, and Mathematics Programs and Related Trends*, GAO-06-114, Washington D.C., October 12, 2005.

¹⁸ Shettle, C., Roey, S., Mordica, J., Perkins, R., Nord, C., Teodorovic, J., Brown, J., Lyons, M., Averett, C., and Kastberg, D. (2007). *The Nation's Report Card: America's High School Graduates* (NCES 2007-467), U.S. Department of Education Statistics, Washington D.C., U.S. Government Printing Office.

¹⁹ Kuenzi, J.J, Matthews, C.M., Mangan, B.F. *Science, Technology, Engineering, and Mathematics (STEM) Education Issues and Legislative Options*, Washington D.C.: Congressional Research Service, Library of Congress, RL33434, updated July 26, 2006.

²⁰ National Science Foundation, *Science and Engineering Indicators*, 2006, Volume 1, NSB 06-01, January 2006, Table 2-37.

²¹ Kuenzi, J.J, Matthews, C.M., Mangan, B.F (2006). *Science, Technology, Engineering, and Mathematics (STEM) Education Issues and Legislative Options*, Washington D.C.: Congressional Research Service, Library of Congress, RL33434, updated July 26, 2006, page 17.

²² Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future, Committee on Prospering the Global Economy of the 21st Century: An Agenda for American Science, Committee on Science, Engineering and Public Policy, National Academy of Science, National Academy of Engineering, Institute of Medicine, Washington D.C.: The National Academics Press, 2007.

²³ Advancing Virginia Through Higher Education: The Systemwide Strategic Plan for Higher Education, State Council of Higher Education for Virginia, December 2002.

²⁴ Advancing Virginia: Access, Alignment, Investment: The 2007-13 Strategic Plan for Higher Education in Virginia, State Council of Higher Education for Virginia, July 2007.

²⁵ US News and World Report, 2003 Graduate School Rankings.

²⁶ Table 304 in the *Digest of Educational Statistics* reports degrees in 7 broad categories: humanities, social and behavioral sciences, natural sciences, computer sciences and engineering, education, business/management, and other fields. For the statistics reported here, data from the natural sciences and computer science and engineering were combined. Some STEM majors as agricultural sciences and natural resources and conservation are classified under "other fields" and therefore, are not included in the reported statistics for this paragraph.

²⁷ Synder, T.D., and Tan A.G. (2005). *Digest of Education Statistics 2004* (NCES 2006-005), U.S. Department of Education, National Center for Education Statistics, Washington D.C.: U.S. Government Printing Office, October 2005, Table 304.

²⁸ Government Accountability Office (GAO), *Higher Education: Federal Science, Technology, Engineering, and Mathematics Programs and Related Trends*, GAO-06-114, Washington D.C., October 12, 2005.

²⁹ AAUW Educational Foundation: *Under the Microscope, A decade of gender equity projects in the sciences*, 081-04-4K 3/04.

³⁰ National Science Foundation, *Science and Engineering Indicators*, 2006. Volume 1, Arlington, VA NSB-06-01, January 2006, table 2-32.

³¹ Kuenzi, J.J, Matthews, C.M., Mangan, B.F (2006): *Science, Technology, Engineering, and Mathematics (STEM) Education Issues and Legislative Options*, Washington D.C.: Congressional Research Service, Library of Congress, RL33434, updated July 26, 2006.

³² Government Accountability Office (GAO), *Higher Education: Federal Science, Technology, Engineering, and Mathematics Programs and Related Trends*, GAO-06-114, Washington D.C., October 12, 2005, page 21.

GLOSSARY

Associate's Degree (Baccalaureate Credit): An award that normally requires two years of full-time equivalent college-level work. Credit can normally be applied towards bachelor's degree completion

Associate's Degree (Occupational/Technical Credit): An award that normally requires two years of full-time equivalent college-level work. Occupational/Technical degrees normally prepare the student for immediate employment.

First Professional Student: A student enrolled in any of the following degree programs: Dentistry (D.D.S. or D.M.D, Medicine (M.D.), Veterinary Medicine (D.V.M.), Law (L.L.B. or J.D.), Pharmacy (Pharm.D.), Theology (M.Div. or M.H.L. or B.D.)

First-time Freshmen (New Freshmen): A student who has no prior postsecondary experience attending any institution for the first-time at the undergraduate level. *Source: IPEDS*

First University Degree: Completion of a terminal undergraduate degree program; these degrees are classified as level 5A in the International Standard Classification of Education, although individual countries use different names for the first terminal degree. Level 5A degrees usually require less than five years to complete. *Source: National Science Foundation, Science and Engineering Indicators* 2006, *Chapter 2: Higher Education in Science and Engineering.*

Full-Time-Equivalent Student (FTE): A statistic derived from the student-credit hour productivity of an institution. For undergraduate students, this is the total annual credit hours divided by 30.

Full-Time Student (undergraduate): A student enrolled for 12 or more semester credits, 12 or more quarter credits, or 24 or more contact hours a week each term. *Source: CDS*

Graduate Student: A student who holds a bachelor's or first professional degree, or equivalent, and is taking courses at the post-baccalaureate level. A student enrolled in a master's, certificate of advanced graduate study, specialist, or doctoral program, not including candidates for first professional degrees. *Source: CDS, IPEDS*

In-State: A student whose domicile in the Commonwealth of Virginia.

Headcount: A student enrolled for more than zero credit hours in courses offered for degree or certificate credit, or a student who meets the criteria for classification as a remedial student. NOTE: Headcount data prior to 1997 includes study abroad students not reported in later years.

High School Dual Enrollment: A high school student who is concurrently enrolled in courses for high school and college credit.

Minority Students: United States citizens and resident aliens who fall into one of the ethnicity/race categories: American Indian/Native American, Asian/Pacific Islander, Black, non-Hispanic, and Hispanic.

New Undergraduate Transfer: A student entering the institution for the first time but known to have previously attended a postsecondary institution at the undergraduate level. *Source: IPEDS/CDS*

Non-Traditional-Aged: Students who are age 25 and above.

Off-Campus (housing): A student enrolled for more than zero credit hours living off-campus.

On-Campus (housing): A student enrolled for more than zero credit hours living on-campus.

Out-Of-State: A student whose domicile is not the Commonwealth of Virginia.

Part-time Student (undergraduate): A student enrolled for fewer than 12 credits per semester or quarter, or fewer than 24 contact hours a week each term. *Source: CDS*

Percent Change: A statistic used to calculate relative change over a period of time.

Percent Change Accounted For By Given Years: A statistic used to calculate how much relative change can be accounted for by a period of time.

STEM Majors: Science, Technology, Engineering, and Mathematics majors.

Traditional-Aged: Students who are aged 24 and under.

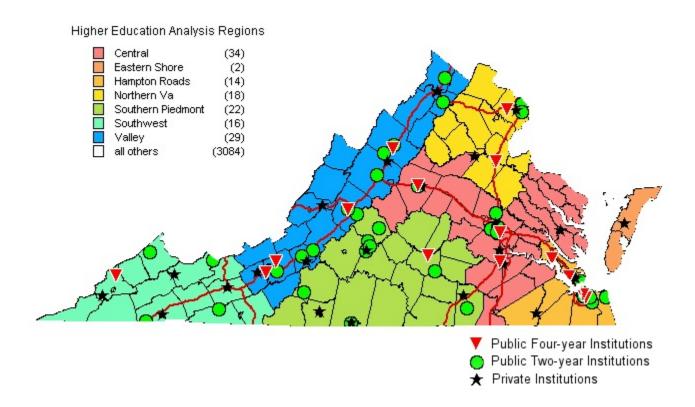
Undergraduate Student: A student enrolled in a four- or five-year bachelor's degree program, an associate degree program, or a vocational or technical program below the baccalaureate. *Source: CDS*

Virginia Regions: For reporting purposes Virginia is divided into seven regions: Central, Eastern Shore, Hampton Roads, Northern Virginia, Southern Piedmont, Southwest, and Valley.

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APPENDIX 1: MAP OF VIRGINIA GEOGRAPHIC REGIONS AND LOCATIONS OF INSTITUTIONS



APPENDIX 2: INDIVIDUAL INSTITUTIONAL DATA

College of William and Mary George Mason University James Madison University **Longwood University** Norfolk State University Old Dominion University Radford University Richard Bland College University of Mary Washington University of Virginia University of Virginia's College at Wise Virginia Commonwealth University Virginia Community College System Virginia Military Institute Virginia Polytechnic Institute and State University Virginia State University

Christopher Newport University